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ABSTRACT

Four books are incorporated into a volume for secondary and postsecondary teachers who wish to become familiar with experiential learning techniques. An overview on experience-based learning and the facilitative role of the teacher is presented in Book One. Book Two deals with planning with students, Book Three concerns the monitoring of student progress, and Book Four deals with evaluating student progress. Together, they present ways to improve the training process, dealing specifically with why and how experiential learning activities might be integrated into instructional programs and how the teachers' roles might be modified accordingly. Each book is comprised of reading materials that introduce concepts about and procedures for experience-based training and corresponding teacher functions. Guided activities and an annotated bibliography of selected source materials are included in each book. A program coordinator's handbook is provided. (JD)

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STAFF DEVELOPMENT GUIDE

Experience-Based Learning and the Facilitative Role of the Teacher

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Experience-Based Learning and the Facilitative Role of the Teacher

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PREFACE

The Handbook accompanies a package of staff development materials consisting of Experience-Based Learning and the Facilitative Role of the Teacher (a set of four books) and two videotapes titled In Addition to the Classroom. The Handbook is intended to assist persons with staff development responsibilities to plan, schedule, and coordinate the use of the materials in either pre- or in-service staff development programs.

ABOUT THE MATERIALS

Contents

The four books in the staff development series are: Book I--Overview to Experience-Based Learning and the Facilitative Role of the Teacher, Book II--Planning with Students, Book III--Monitoring Student Progress, and Book IV--Evaluating Student Progress. Together, they present ways to improve the training process in secondary and post-secondary instructional programs and courses, dealing specifically with why and how experiential learning activities might be integrated into instructional programs or courses and how the teacher's role might be modified accordingly. Each book is comprised of reading material that introduces concepts about and procedures for experience-based training and corresponding teacher functions, guided activities to allow further exploration by trainees, and an annotated bibliography of selected source material to further stimulate the reader.

The videotapes, In Addition to the Classroom, Parts I & II, describe three types of experience-based programs or activities: secondary career exploration, post-secondary internship, and a classroom-based activity. These sample programs outline some of the general characteristics of experience-based learning and illustrate the facilitative teacher functions of planning, monitoring, and evaluating.

Rationale

The materials reflect a commitment to three general assumptions about the learning process:

- Learners should be moving toward increased responsibility for planning, decision-making, carrying out instructional decisions, and evaluating their own education. Doing so capitalizes on students' interests as well as on their potential to be self-directed in learning.
- Students vary in the ways in which learning is most efficient and effective and should have alternative learning activities and resources from which to select.
- Going beyond symbolic learning methods (reading, hearing and talking about phenomena) to include experience-based techniques (role-playing, simulations, and practice in real contexts, such as the community) enhances the quality of education.

The materials are designed to help teachers create instructional programs or courses that are consistent with these three assumptions.

Audience

Teachers who are working or anticipate working in secondary or post-secondary institutions are the intended audience. Since the materials are introductory, they will be particularly useful to both those training to become teachers and experienced teachers who are yet unfamiliar with experiential techniques (classroom or community-based). Furthermore, the materials are not directed at any one subject area, discipline, or course. Whether trainees plan to teach mathematics, history, English, psychology, chemistry, woodshop, or fire-prevention, experience-based techniques are applicable and these materials can be used or adapted.

Intended Benefits for Trainees

The materials are intended to provide trainees with:

- An introductory knowledge about experience-based learning;
- An introductory knowledge about the teacher's role as a facilitator;
- Opportunities to practice and develop skills and perspectives concerning the design and use of experience-based learning activities; and
- Opportunities to practice and develop skills and perspectives concerning certain role functions such as planning, monitoring, and evaluating student progress.

How Materials Can Be Used

Individual trainees can use the books by simply omitting all activities requiring group interaction. However, an effective method is to form a voluntary group and have a training coordinator available to schedule, make arrangements, assist participants to reflect on experiences, lead discussions, and to help assess individual progress. Group interaction is thought to be extremely important to the learning enterprise.

The books may be used selectively in a workshop of several days duration or in a course extending over several weeks. The latter arrangement is recommended, since the extended period permits participants to engage in outside-of-class or off-campus activities and allows time for the participants to reflect on experiences and, when appropriate, to practice or apply skills.

Trainees should also keep a notebook or journal recording their activities, ideas, and reactions during training. Such a record may be a useful tool for later reference when working with students or orienting other educators to experiential learning procedures.

In addition to the Classroom is designed to orient trainees to experience-based learning as well as to serve as a stimulant for discussion concerning teacher functions.

SUMMARY OF TRAINING COORDINATOR ROLE

Preferably, the person assuming the role of training coordinator for the materials will have had some involvement or familiarity with experience-based training programs and procedures. At the very least, the training coordinator should be supportive of the concepts and practices involved in integrating experiential learning techniques with more conventional classroom approaches.

The person who acts as the training coordinator for the group in a pre-service situation would most likely be the course instructor; for in-service training it could be an administrator, a district staff member, a principal, a teacher, or it could be a trainee selected by the group. It should be clear prior to the first session, however, who the training coordinator will be so that person can make the necessary preparation. Also, the training coordinator ought to participate in as many of the learning activities as possible.

The training coordinator has two distinct but, in this case, complementary responsibilities:

- The first is to perform the tasks associated with planning, scheduling, organizing, and coordinating the staff development activities. In the books, for example, some of the activities recommend that teachers currently employing experiential learning techniques be invited to participate in sessions or be approached to arrange observation for trainees. The coordinator will need to make sure that arrangements for such events are made. The coordinator will also need to arrange for 3/4" videotape viewing equipment. If the Learning Style Inventory is to be used from Book I, copies will need to be acquired in advance.

- The second responsibility is to promote a training environment consistent with the underlying philosophy implied by experiential learning techniques and a facilitative teacher's role. This philosophy entails providing a learning environment in which

> the student's purposes form the basis of learning plans; the student is involved actively in planning his or her own learning and in evaluating the results; and the teacher's role, while varying according to the context, will be moving toward helping the student assume as much responsibility as possible for learning. Since this philosophy is recommended to trainees as an appropriate approach to use with their students, the staff development program ought to reflect a similar philosophy.

Most packaged materials have limitations. The most obvious, but unavoidable, limitation of these materials is that as printed statements they tend to contradict the intent of experience-based learning. Perhaps more importantly, the readings, the activities, and the videotape illustrate or represent only pieces of a larger, more comprehensive picture of experiential learning and the facilitative role of the teacher. In spite of the limitations, the materials should provide the basis for building expertise through further experiences of the trainee's own design. To facilitate this happening, the training coordinator is encouraged to adapt the learning activities to make them more suitable to the interests and needs of the trainees.

GUIDELINES FOR COORDINATION

A few general statements that pertain to any training situation are suggested:

- Often it is important or necessary to do preplanning with trainees or adapt certain activities to make them more effective for the interests and backgrounds of the trainees. The group must also accept some responsibility for rescheduling or revising certain activities to accommodate their own particular learning goals.

- The training coordinator ordinarily will be responsible for arranging for a suitable meeting place for group sessions.

- The coordinator should be familiar with all materials prior to their use by trainees.

- When additional material resources are needed (e.g., the Learning Style Inventory from Book I) the coordinator is responsible for obtaining them.

- The coordinator should encourage active group involvement in shaping the training and set up frequent opportunities for group discussion and reflection.

The following assumptions regarding training activities and their sequence should be discussed with trainees prior to the first session.

- The training coordinator role is not viewed as prescriptive; the training group shares in the planning and decision-making functions.

- The proposed training activity organization is presented _as if_ materials were to be used in certain sequence. However logical the implied sequence, it is expected that many variations will occur in actual use. Training coordinators and training groups should have little difficulty modifying the proposed procedures to fit a user-selected sequence.

- User interest in the activities will vary not only because of differences between secondary and post-secondary contexts, but also because of differences in experiences and competences of trainees. Thus, selection of suitable activities for use by the training group is an ongoing task.

- Because groups will be different in their selections of activities and the amount of time required for each, pre-set time schedules seem useless. Training activities are, therefore, organized into "sets" that fit together. Whether 1, 2 or 3 sessions are required per set will vary with the situation. Thirty hours is probably the maximum time required to complete all activities.

A possible sequence of activities, assuming some use of all four books and the videotape, is given in Figure 1. The number of sets do not reflect the number of sessions that might be required. Rather, the number of sessions will vary with the number of books chosen for use, the number of activities selected by trainees, the time available per session, and, of course, the time available to devote to the materials. The sets suggest only a series of activities that seem to fit together naturally. Assuming a 2-1/2 to 3 hour time period per session, a total of 10 to 12 sessions might be necessary.

PRESENTATION AND DISCUSSION AIDS

At various times, the training coordinator will be providing information, helping trainees plan, leading discussion, giving feedback, encouraging reflection, offering opinions or perceptions, or promoting integration and consolidation of learning. These tasks require considerable experience and skills that are not provided by this Handbook. The training coordinators are expected to possess the competences needed to perform these planning, monitoring and evaluating functions, and the material below is intended only to make the coordinator's task a little easier. The material is organized around the contents of each set, as described in Figure 1.

FIGURE 1
PROPOSED TRAINING ACTIVITY ORGANIZATION

SET 1	SET 2	SET 3	SET 4	SET 5
●Discuss content, purpose and assumptions of materials.	●Discuss Book I and other readings.	●Discuss Book II and other readings.	●Discuss Book III and other readings.	●Discuss Book IV and other readings.
●Explain training coordinator's and trainee's roles.	●Complete selected activities and discuss.	●Complete selected activities and discuss.	●Complete selected activities and discuss.	●Complete selected activities and discuss.
●View videotape In Addition to the Classroom.	●Select Further Exploration activities from Book II.	●Review major points of Books I and II.	●Review major points of Books I, II, and III.	●Review major points of all Books.
●Select Further Exploration activities from Book I.	●Examine Book II bibliography.	●Select Further Exploration activities from Book III.	●Select Further Exploration activities from Book IV.	●Design final set of activities, e.g., further practice, group assessment, planning for application.
●Examine Book I bibliography for additional readings.	●Develop schedule.	●Examine Book III bibliography.	●Examine Book IV bibliography.	
●Develop schedule.		●Develop schedule.	●Develop schedule.	
BOOK I	BOOKS I and II	BOOKS II and III	BOOKS III and IV	BOOK IV

Set One

- Discuss Content, Purposes, and Assumptions of Training Materials: This discussion, which will occur at the first session or prior to it, should provide the trainees with a fairly clear understanding of the contents of the four books, their purposes and how they might be used. To accomplish this, each trainee should have a set of the books and, the training coordinator will need to familiarize him or herself with the materials prior to this session.

  The orientation should include a condensed description of the program materials (provided on pages 1-4 of this Handbook) as well as a brief look at the Table of Contents for each of the four Books. The coordinator should generate a discussion designed to elicit the trainees' attitudes, the purpose of the materials, and the intended outcomes of these materials for the trainees. Again, information in the Handbook should help direct the discussion.

- Explain Coordinator's and Trainee's Role: Pages 5-7 of this Handbook contain information regarding the proposed roles of coordinator and trainee. Trainees should understand that their role during the training sessions will be similar to the role recommended in the materials for students in secondary and postsecondary programs. Since each coordinator will have his or her own style of working with a group, any set of guidelines for coordinators will need to be adapted to fit situation and style.

- View Videotapes: The videotapes, In Addition to the Classroom, Part I and II, depict several experience-based learning situations and will be helpful as an introduction to the content and focus of the training materials. The coordinator should preview the videotapes prior to the first session, familiarizing him or herself with the ideas presented. Some specific suggestions for using the videotapes are included in pages 20-26 of this Handbook.

- Select Activities from Book I FURTHER EXPLORATION: Continuing the overview approach, have the group first examine the FURTHER EXPLORATION in terms of its contents and the group's purposes. In preparation for the following session, the group should select activities suitable to its interests. If time and number of sessions permits, it is recommended that all Book I activities be used. The group should not only select which activities they will complete, but also how they will complete them, i.e., individual or group.

- Examine Book I BIBLIOGRAPHY: One useful way of expanding the knowledge backgrounds of the trainees is for each to select a fairly brief reading to report on to the group at the next session. By making oral reports everyone's knowledge will be extended beyond the background information in the Book I READING section.

- Develop Tentative Schedule: Taking into consideration the time available for training sessions and the number of activities selected, develop a session schedule that will permit the group to complete the activities for Set 2.

Set Two

- Discuss Book I READING and other Readings: One way to begin and sustain a helpful discussion is to throw out some questions geared toward emphasizing the essential issues. For example:

1. Considering the instructional approaches continuum (page 2) what kinds of subjects or courses are most appropriate for each?

2. Will the relative importance of the general characteristics of the programs described in pages 5-6 vary with different subject areas or courses? How?

3. What are some of the important factors in deciding whether or not to employ community-based learning activities?

4. To what extent is the theoretical framework presented (pages 10-15) consistent with the trainees' theories?

5. How does the information presented in Figure 2 (page 21) affect the trainees' perceptions about their roles as teachers?

6. General questions designed to draw out the coordinator's or trainees' interests or concerns.

- Complete Selected Book I FURTHER EXPLORATION: and Discuss:

Activity 1. Trainees complete a self-administered inventory to learn more about their own preferred learning style and to consider the effects of working with students of varying learning styles.

Activity 2. Trainees think about teaching styles with reference to a specific course or subject area and consider how the use of various instructional approaches requires modifications in teaching styles.

Activity 3. Through discussion and feedback, trainees are informed of a wide variety of issues that may be raised by various persons concerning experience-based learning.

Activity 3 gives a broad overview of many of the practical considerations with which trainees will eventually need to cope. Activity 3 may also be used at the end of training as a partial summary and, in conjunction with Activity 4 below, as a check of the trainees' preferences and intentions concerning the use of experiential learning procedures.

Activity 4. Through reflection and discussion, trainees assess the compatability of experiential learning procedures with the role they envision for themselves.

- Select Activities from Book II FURTHER EXPLORATION: In preparation for the next session, the group should review the various activities and select from among them those that are most appropriate for their interests and needs. While some activities are appropriate for both secondary and post-secondary audiences, the content of others is more directly related to one or the other. The group also should plan how they will complete the selected activities.

- Examine Book II BIBLIOGRAPHY: As before, consider selecting items from the annotated bibliography for knowledge building.

- Develop Schedule: Develop a tentative session schedule to accomplish the various activities for Set 3.

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Set Three

- Discuss Book II READING and Other Readings: The following questions may be useful for discussion purposes.

1. Is planning of the kind presented in Book II more important for experience-based approaches than for more conventional ones? Why or why not?

2. Under what circumstances might a teacher choose not to individualize or personalize the planning process?

3. If there are such circumstances (as described in #2 above) which of the six phases of developing individualized student plans would be omitted or modified? Why?

4. Would the level of specificity of stating instructional outcomes (see pages 22-24) vary as a result of the subject area? As a result of student characteristics? In what ways?

5. How might one go about establishing a group of community resource people willing and competent to work with students on learning projects?

- Complete Selected Book II FURTHER EXPLORATION: and Discuss:

Activity 1. Responding to questions on their own planning experience and preferences and suggesting some sample experiential activities will help trainees focus on the nature of the planning task.

Activity 2. In terms of their own subject area, trainees practice creating individual learning plans.

Activity 3. Trainees discuss sample dialogue of a post-secondary planning session, analyzing the teacher's interaction and suggesting alternative approaches.

Activity 4. A role-play suggestion to illustrate the technique of screening potential community resources and some "practice" suggestions for developing some potentially useful resources.

Activity 5. Trainees discuss a sample dialogue of a teacher preparing a student for a field placement interview, relating it to their own style and situation.

Activity 6. A programmed text that allows trainees some practice screening sets of objectives according to certain given criteria.

Activity 7. Trainees develop guidelines for journal keeping and practice keeping a journal.

Activity 8. Trainees reflect on their own situation to determine the feasibility of planning experience-based activities or using an inter-disciplinary approach.

Activity 9. Self-assessment of trainees' current competences with regard to planning.

- Review Major Points of Books I and II: A review serves as a means of responding to questions or concerns of trainees and to reinforce what has been accomplished thus far. Perhaps asking trainees to summarize major concepts, understandings, or points of view they have developed as a result of activities would be one way of reviewing. Once this has been done, the group could consider the implications of these concepts on their teaching styles.

- Select Activities from Book III FURTHER EXPLORATION: As before, ask the group to review the activities for the purpose of selecting those they want to work through and determining how they want to go about it.

- Examine Book III BIBLIOGRAPHY: Select entries for additional reading.

- Develop Schedule: Given the activities for Set 4, develop a session schedule.

Set Four

- Discuss Book III READING and Other Readings: Consider using the following to facilitate the discussion of Book III.

1. What place does the monitoring process have in more conventional classroom situations? How might it be included as part of the teacher's role?
2. When the monitoring function is omitted, what detrimental effects are likely?
3. What kinds of monitoring information could be shared and how might the process be accomplished?
4. Which monitoring concepts and practices present the most difficulties for trainees?

- Complete Selected Book III FURTHER EXPLORATION: The activities in Book III are intended to help trainees reflect on their own monitoring preferences, illustrate some monitoring approaches, reflect on causes of various types of monitoring problems, and help trainees create solutions to these monitoring problems.

It may be helpful to view the videotapes again at this point to examine the teacher's role in monitoring with students. In particular, Part II illustrates debriefing, and replanning, as well as using the student's journal to discuss problems and monitor progress.

Activity 1. Responding to questions on their own monitoring practices and relating them to the READING section will help trainees focus on the nature of the monitoring task.

Activity 2. A sample dialogue between teacher and student is offered to help trainees identify the elements of a monitoring session and to discuss the outcomes of that session.

Activity 3. Given some sample "problems" trainees suggest possible teacher responses or actions.

Activity 4. Trainees discuss the facilitative techniques used by one teacher in a sample dialogue of a monitoring session.

Activity 5. Trainees determine some appropriate responses to situations involving students' personal problems.

Activity 6. Four possible strategies for problem-solving with a student are outlined for trainees to select from and discuss in terms of likely effects.

Activity 7. Through discussion trainees explore the facilitative teacher's role in helping a student link theory and practice.

Activity 8. Trainees consider some possible administrative concerns with respect to monitoring experience-based activities.

Activity 9. Self-assessment of trainees' current competences with regard to monitoring.

- Review Books I, II, and III: As before, ask the trainees to summarize the major points of the concepts introduced thus far. Also, identify concerns and problems of trainees, and help them summarize their own opinions regarding experience-based learning and the teacher role.

- Select Activities from Book IV FURTHER EXPLORATION: Ask the group to review the activities for the purpose of selecting those they want to use and determining how they plan to complete them.

- Examine Book IV BIBLIOGRAPHY: Select entries for additional reading.

- Develop Schedule: Given the activities for Set 5, develop a session schedule.

Set Five

- Discuss Book IV READING and Other Readings: Consider using the following to facilitate the discussion of Book IV:

1. Would trainees be willing to consider a multiple approach to evaluating student progress, such as suggested in the section?
2. Under what circumstances would it be possible to use most, if not all, of the "guidelines" for individual assessment? (Pages 7-9)
3. If only one-half of the guidelines could be used, which ones would trainees omit? Why?
4. How could teachers realistically improve the process of setting standards for their course?
5. Which of the assessment techniques given in Table I (Pages 14 - 17) are the most useful? Why?

- Complete Selected Book IV FURTHER EXPLORATION and Discuss:

Activity 1. Trainees consider how approaches to assessment might vary as a result of different learning outcomes.

Activity 2. Trainees think about assessment of group activities as contrasted with assessment of individual activities.

Activity 3. Alternative assessment techniques are considered in a situation where use of a conventional approach (a written test) would penalize several students.

Activity 4. Trainees examine and discuss the issue of assigning academic credit for community-based activities.

Activity 5. Through interviews and discussion, trainees develop an understanding of how standards for credit assignment or grades are set and vary as a function of different subject areas.

Activity 6. Trainees identify factors that effect qualitative assessments of students' work and develop criteria for such assessments.

Activity 7. Using a secondary school level interdisciplinary context, trainees consider evaluation approaches that permit assessment of progress and give guidance for assigning credit or grades.

Activity 8. The trainees conduct a self-examination of their preferences for assessment and familiarity with the various assessment techniques.

This last activity may serve as a review of the trainees' status regarding assessment. The variety of choices made by individual trainees could form the basis for a comprehensive discussion.

- Review all 4 Books: As before, lead the trainees in a discussion of their perceptions of the topics presented. Help them identify their position regarding intentions for using experience-based approaches, which functions they regard as most important to perform, and how competent they presently feel about performing them. Repeating

FURTHER EXPLORATION Activities 3 and 4 in Book I is recommended as part of a final session. These two activities will permit trainees to test their own familiarity with many key ideas and issues.

- Design Set of Activities for Final Session(s): If time permits, ask the group to work together in planning and designing one or more final sessions for the purposes of applying their new knowledge and skills or if they wish, for further exploration. For example, trainees may wish to:

1. Design learning activities for subject areas or courses of their choice.
2. Plan assessment approaches for a particular course.
3. Develop a plan for recruiting and establishing a group of community resource persons.
4. Develop an implementation plan whereby experiential learning procedures could be introduced into an existing high school or post-secondary institution.
5. Design learning activities which might expand the training group's knowledge and skills.
6. Plan to videotape the group's own experiential activities, planning, sessions, or role-plays and critique them.

Ask the group to list and select the activities they wish to engage in and as a group develop a schedule to complete these activities.

USING THE VIDEOTAPES

The two videotapes In Addition to the Classroom Parts I and II, describe one secondary and two post-secondary experience-based programs or activities and offers examples of teachers in these programs performing the functions of planning, monitoring and evaluating with their students. Viewing these videotapes at the initial session may help to clarify the content, purposes and assumptions of these materials as well as to stimulate some discussion about experience-based learning -- why is it useful? How does it work? Is it good for all students or subject matter?

The nature of the subject matter, the learning environment, or the facilitative styles depicted in the videotapes may not correspond to the viewer's own situation, but they can serve to realistically portray some aspects of the facilitative role -- what it means to plan with students, to monitor their progress, and to evaluate the outcomes in an experience-based program.

In the first session of the training, the content of the videotapes can be most helpful as a means of focussing on the nature of the teacher role and of stimulating an exchange among the teachers describing their own situations as well as their needs and expectations of this training. How would they define "facilitation"? How do they understand the functions of planning, monitoring and assessing? Could they use any community resources in their own program? What specific skills would they like to focus on in this training?

In a later session the teachers may wish to view the videotapes again to discuss specific aspects of a program or of a particular teacher/student interaction. Some suggestions for using the videotapes for this purpose are included in this section.

In Addition to the Classroom: Part I (18 min)

Segment 1: Secondary Career Exploration

1. Planning Session - The teacher facilitator plans with student interested in business.

    a. Consider the following:

    - What takes place in this session? What skills are used by the teacher?
    - What kind of background information is elicited?
    - What are the purposes of this planning session?

    b. Can this type of individualized planning for student projects be a part of your approach? Review the six steps of the planning process in Book II and determine if you could increase student participation and responsibility for any parts of your own planning process. Role-play a planning session with a "student" to practice making a learning plan in your own subject area.

2. Monitoring Session - The teacher facilitator meets with same student to check on progress and identify problems or new learning.

    a. Consider the following:

    - How does the teacher respond to the student's dissatisfaction?
    - Are there any additional questions you would ask the student in this session?

    - This teacher decided to replan the project with the student. Under what circumstances would you choose to drop a project or placement rather than replan?

  b. If you were monitoring individual student projects in your course or classroom, how would you choose to do it? How frequently would you meet with the student? For what purposes? What questions would you ask the student?

3. Assessment Session - The teacher facilitator meets again with student to go over products with her.

  a. Consider the following:

    - What is the basis for the teacher's evaluation of the student's work?

    - The student has forgotten to include a part in the report. What step would you take next in this situation.

  b. If you were evaluating individual student projects, what types of products or measures would you use? How would you conduct the assessment session?

Segment 2: Classroom-Based Activity

1. Students in a communications class work together to present a mock trial. Consider the following:

    - Who does the planning, i.e., selecting the topic and assigning the roles?

- What is the teacher's role during the project's evaluation?

- What was the assessment process for the project? How did students get feedback on their performance?

- What benefits did the teacher feel the students received from this type of activity?

2. What kind of classroom-based group project could you do? Suggest one or more possible projects for your own subject area and describe how you would:

   - Introduce the idea to the group.
   - Decide roles and/or topics.
   - Set goals and objectives.
   - Specify products and outcomes.
   - Set the schedule for completion.
   - Monitor the progress.
   - Integrate theory with practice.
   - Evaluate the products and/or performance.

In Addition to the Classroom: Part II (18 min)

Post-Secondary Internship

1. Planning Session - The teacher facilitator plans with student for a psychology field service placement.

   a. Consider the following:

      - What happens during the session? What skills are demonstrated by the teacher?
      - What questions does the teacher ask the student?
      - How does the teacher use this information to help the student select a placement?
      - How is the final selection of placement made?

   b. How would you plan individual placements for students in your subject matter area? Consider the six steps of the planning process as outlined in Book II.

2. Monitoring Session I - The teacher facilitator meets with a student (Georgia) to check on her progress in her field placement activities.

   a. Consider the following:

      - How did the teacher discover Georgia's problem?
      - How did the teacher respond to the problem situation in terms of questioning, giving feedback, and applying directives?

- What action did the teacher choose to take in this situation? Would you have chosen a different strategy?

3. Monitoring Session II - The teacher facilitator meets with a student (Ellen) to check on her progress in her field placement activities.

    a. Consider the following:

        - What purpose does keeping a journal serve?

        - How does the teacher try to "extend the learning" in this session?

        - The student seems to be having a positive experience at the site. What additional questions would you ask in this session to verify that impression or add a new dimension to the experience for the student?

    b. If you were monitoring individual student placements, how would you choose to do it? How frequently would you meet with the student? For what purposes? What questions would you ask the student?

4. Assessment Session - The teacher facilitator meets with a student who has completed his placement to assess his performance.

    a. Consider the following:

- What is the basis for the teacher's assessment conference with the student?

- How does the teacher include the student in the assessment process?

- This student's performance was rated very high. What could the teacher focus on in terms of improvement or future direction?

b. If you were evaluating students in a field placement program, what would form the basis of your assessment? How would you conduct this final session with the student? What would you hope to accomplish?

Overview to Experience-Based Learning and the Facilitative Role of the Teacher

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PREFACE

This Book, Overview to Experience-Based Learning and the Facilitative Role of the Teacher, is part of a set of staff development materials consisting of four Books, a training Coordinator's Handbook and two 18-minute videotapes titled In Addition to the Classroom. The materials are designed for use in either pre-service or in-service staff development programs.

ABOUT THE MATERIALS

Contents

The four books in the staff development series are: Book I--Overview to Experience-Based Learning and the Facilitative Role of the Teacher, Book II--Planning with Students, Book III--Monitoring Student Progress, and Book IV--Evaluating Student Progress. Together, they present ways to improve the training process in secondary and post-secondary instructional programs and courses, dealing specifically with why and how experiential learning activities might be integrated into instructional programs or courses and how the teacher's role might be modified accordingly. Each book is comprised of reading material that introduces concepts about and procedures for experience-based training and corresponding teacher functions, guided activities to allow further exploration by trainees, and an annotated bibliography of selected source material to further stimulate the reader.

The two videotapes, In Addition to the Classroom, Part I and II, describe three types of experience-based programs or activities: secondary career exploration, post-secondary internship, and a classroom-based activity. These sample programs outline some of the general characteristics of experience-based learning and illustrate the facilitative teacher functions of planning, monitoring, and evaluating.

Rationale

The materials reflect a commitment to three general assumptions about the learning process:

- Learners should be moving toward increased responsibility for planning, decision-making, carrying out instructional decisions, and evaluating their own education. Doing so capitalizes on students' interests as well as on their potential to be self-directed in learning.
- Students vary in the ways in which learning is most efficient and effective and should have alternative learning activities and resources from which to select.
- Going beyond symbolic learning methods (reading, hearing and talking about phenomena) to include experience-based techniques (role-playing, simulations, and practice in real contexts, such as the community) enhances the quality of education.

The materials are designed to help teachers create instructional programs or courses that are consistent with these three assumptions.

Audience

Teachers who are working or anticipate working in secondary or post-secondary institutions are the intended audience. Since the materials are introductory, they will be particularly useful to both those training to become teachers and experienced teachers who are yet unfamiliar with experiential techniques (classroom or community-based). Furthermore, the materials are not directed at any one subject area, discipline, or course. Whether trainees plan to teach mathematics, history, English, psychology, chemistry, woodshop, or fire-prevention, experience-based techniques are applicable and these materials can be used or adapted.

Intended Benefits for Trainees

The materials are intended to provide trainees with:

- An introductory knowledge about experience-based learning;
- An introductory knowledge about the teacher's role as a facilitator;
- Opportunities to practice and develop skills and perspectives concerning the design and use of experience-based learning activities; and
- Opportunities to practice and develop skills and perspectives concerning certain role functions such as planning, monitoring, and evaluating student progress.

How Materials Can Be Used

Individual trainees can use the books by simply omitting all activities requiring group interaction. However, an effective method is to form a voluntary group and have a training coordinator available to schedule, make arrangements, assist participants to reflect on experiences, lead discussions, and to help assess individual progress. Group interaction is believed to be extremely important to the learning enterprise.

The books may be used selectively in a workshop of several days duration or in a course extending over several weeks. The latter arrangement is recommended, since the extended period permits participants to engage in outside-of-class or off-campus activities and allows time for the participants to reflect on experiences and, when appropriate, to practice or apply skills.

Trainees should also keep a notebook or journal recording their activities, ideas, and reactions during training. Such a record may be a useful tool for later reference when working with students or orienting other educators to experiential learning procedures.

In Addition to the Classroom is designed to orient trainees to experience-based learning as well as to serve as a stimulant for discussion concerning teacher functions.

INTRODUCTION

These materials advocate the use of experience-oriented educational procedures designed to improve instructional programs for secondary and post-secondary students. Both the content and the method of instruction are addressed, since both affect learners' personal development in a number of intellectual, physical, and interpersonal competence areas as well as the learners' confidence in their application. The development of personal and social responsibility, and the ability to formulate plans and make decisions that integrate values, interests, and aspirations are examples of key areas for development of competences.

Such competences are very powerful in that their importance is undiminished by changing societal conditions or by changing student interests. While schools are not solely responsible for them, the instruction should be designed to facilitate their development.

This booklet and the accompanying materials are designed for the teacher whose aim is to help students acquire not only these competences but also the confidence, social and personal responsibility, and a sense of purpose to help guide their behavior. A new perspective is suggested and techniques for modifying both the instructional approach and the role of the teacher are provided. The approach proposes that (1) teachers plan their instructional programs to include an expanded array of experience-based learning activities for students and (2) teachers consider ways of modifying interactions with students so that students play a larger role in managing their own learning.

Book I provides an overview of the theory and practice of experience-based learning and what it means to teachers. Teachers are often called upon to explain, promote, even defend their educational programs. To help them with their answers, this chapter focuses on a number of the key questions and issues often asked or raised--first about experience-based learning and second, about the teacher's role.

WHAT IS EXPERIENCE-BASED LEARNING?

In experience-based learning the student studies a subject through activities requiring a high level of involvement: trying out an idea, testing a hypothesis, acquiring a skill, or applying knowledge and skills. In fact, instructional approaches can be thought of as a continuum of learner involvement levels, ranging through:

> Didactic/symbolic -- The primary vehicle for learning is the lecture, printed text, essay, exhibit, or demonstration. In these cases the learner reads, hears, talks, writes about, or observes the phenomenon being studied. When learning activities are limited to these kinds of responses the level of involvement may be low for many students. Such responses, while valuable, are not considered to be experience-based for purposes of these materials.
>
> Simulations -- In simulations the classroom setting is arranged to approximate a situation and/or environment found outside the school. Science laboratories, industrial or applied arts classes, drama productions, stock market simulations, and mock trials are all examples of simulated learning and are forms of experience-based procedures.
>
> Community or Field-Based -- Off-campus learning activities are designed as integral to an academic program. For example, an economics textbook could be supplemented by experience-based activities at an investment firm. Such activities are carefully planned and may occur at various community sites where an employer, is willing to spend some time as a resource, has been identified and oriented to the purposes of and expectations for the experience-based learning. The amount of time actually spent at a community site will, of course, vary depending on the learner's purposes and time made available at the site.

> For example: Orientations of one to three days are designed to acquaint the learner with a subject area, problem issue, or career possibility. Explorations of two to three weeks yield sufficient exposure to a subject area, problem issue, or career area to allow attention to basic concepts and processes. An investigation provides the student with the opportunity to develop extensive knowledge or skills in the subject area, problem issue, or career area and may continue over a quarter, a semester, or even longer periods of time. Regardless of the amount of time devoted to a particular community site, the activity should be designed so that the learner is actively engaged in some realistic capacity.

Implicit in this continuum are three ideas that, in a sense, summarize the experience-based approach. When proceeding from didactic/symbolic toward simulation and community or field-based approaches, learning activities (1) become increasingly experience-based, (2) are more realistic, and (3) permit learners to participate actively in a task, solving a problem, understanding a concept, or developing a skill. All three approaches are valuable and probably necessary to accommodate the variety of learners as well as the range of topics to be studied.

The usefulness of experience-based learning (simulations or community-based) is not limited to certain subject/discipline areas. However, ideas for experience-based activities are easier to generate for some subject areas than for others.

WHERE ARE EXPERIENCE-BASED PROGRAMS IN USE?

Many kinds of programs use experience-based learning techniques. Experiential learning, both in-class simulations and community-based activities can reinforce, supplement, or enhance the educational process in virtually any classroom-based subject area/discipline. When out-of-classroom learning is appropriate, businesses, professional offices, radio or television stations, and craft shops all represent a variety of opportunities.

Experiential learning approaches are also used extensively in career education or career exploration programs where career decision-making is a major objective. For example, cooperative education programs at the post-secondary level have students alternating terms in classroom studies and related employment. Service-learning internships represent another approach where the primary purpose is to provide students with the opportunity to serve others in the community.

Another approach to the use of experience-based education is found in the "alternative programs" at both secondary and post-secondary institutions. Here community placements form the basis for the entire academic program. The experience site in the community becomes the primary vehicle around which to plan, organize, and carry out the learning enterprises.

Experience-based learning techniques, both in-class and in the community, are used in a variety of educational programs. Their purposes may vary, e.g., to supplement or enhance a classroom academic program, to foster career exploration and career decision-making opportunities, or to provide a totally different learning environment, such as in "alternative programs." The amount of time devoted to experience-based learning activities, whether in-class or in the community, will also vary.

Still, there are some basic characteristics which are shared among these programs. Some of these are:

Learning experiences are planned and are intended to achieve certain predetermined outcomes. Whether tightly or loosely structured; whether at orientation or investigative levels; whether planned primarily by the teacher, the student, or in collaboration; whether in or out of class; the activities are aimed at certain specified educational goals and objectives. They are designed to provide a "high quality" learning experience. Sometimes of equal value are the outcomes that were unanticipated, if not unintended. The experience-based approaches increase the likelihood of their occurrence. Making use of these unanticipated outcomes is an important part of the teacher's role.

Learning experiences are directly related to the students' academic program. The program may focus on interpersonal skills, basic skills, an academic subject, career development, or it may attempt to integrate some or all of these. But in all cases it attempts to relate what the student is learning didactically to what is being experienced in simulations or at a community site. The insights from such experience can be used to illuminate and even alter the theoretical content of the subject area. Most often there is a blend or mixture of experiential and didactic/symbolic learning activities.

Programs are personalized. Experiences, whether in the community or not, are planned in terms of their appropriateness to the interests, curricular needs, and abilities of the individual student.

Adults in the community are often important parts of the educational program. Resource persons in the community function in a more or less mentor capacity, usually with some proficiency in the students' area of interest, and often participate in planning and evaluating the students' learning activities. These adults are volunteers and have been oriented to the program's purposes, expectations, and role responsibilities.

More responsibility is normally placed on the learner. Whether the emphasis is on developing problem-solving skills, learning about governmental operations, or learning medical laboratory procedures, students are challenged, often required, to assume more responsibility, think for themselves, and operate on a more independent level of communication, decision-making, and action.

Hands-on experiences are emphasized. The student is directly involved in some level of activity; its relationship to the intended subject area is central to the learning process. It is through doing something that the student can see consequences of action and learn from them. Such experiences are seen as motivational and as helping establish or strengthen learning. To reiterate, it is not just the direct or hands-on experience that is desired; it is the provision of a "quality" experience that has been designed to supplement, enhance, even cause, learning to take place.

WHAT DOES EXPERIENCE-BASED LEARNING ADD TO THE LEARNING PROCESS?

Experience-based learning activities are meant to enhance and supplement rather than replace other forms of learning activities. Used appropriately, they are useful in reinforcing and extending concepts. Students are placed in situations where they take action with respect to a concept through reflection. Understanding of the concept is then modified and integration between thought and action, as well as personal reevaluation of both, is facilitated. Learners also gain skill in abstracting general principles from their experiences--a most fundamental conceptual skill.

Learning activities often occur in a variety of settings, giving the student more expanded opportunities to develop communication skills, motor skills, and problem-solving abilities, perhaps a better opportunity to think and act in interdisciplinary situations, and an exposure to many career possibilities.

Some subject areas lend themselves more easily to experience-based activities, particularly those which have a product or skill outcome (e.g., clerical/business courses, the arts, professional roles, such as in medicine, counseling, education, electronics, carpentry). But experience-based learning techniques are not restricted to particular disciplines, and all areas of study should be considered. For example, teachers of English classes could develop learning activities in which students apply writing skills in a variety of out-of-school settings: a newspaper, a radio station, an advertising agency, public agencies. Mathematics teachers might look to accounting firms, finance offices, engineering or architectural firms, and so forth.

HOW IMPORTANT ARE OFF-CAMPUS OR COMMUNITY SITES IN EXPERIENCE-BASED EDUCATION?

Many of the benefits of experience-based learning can be received by rearranging the classroom environment and having students participate in activities that require applying and practicing various skills. Using simulated situations students can test their knowledge, receive feedback, and reflect on their performance. However, students remain essentially under the control of the teacher and thus lack the opportunity to exercise greater independence. Limiting the experiences to the classroom further deprives learners of valuable interaction and observations available to them when sites outside the classroom are used. In-class simulations may be a helpful in-between activity, a transition between classroom activities and community sites.

Community sites, used judiciously, can add quality to the learning endeavor. In some ways use of community sites is reminiscent of the apprenticeship system, a learning method by which skills, know-how, and simple human understanding were passed from one generation to another. A variety of competent adults in the community with diverse backgrounds and expertise act as colleagues in the educational process, serving as models and sharing their skills and knowledge with students. The key to effective use of community sites is the match between the learner's educational needs and the opportunities to meet or partially fulfill those needs at a particular site. How this match can be accomplished is discussed later.

In addition to learning more about the realities of and relationships with people, students can improve the basic skills of reading, writing, and computation by using them to solve real problems in everyday life. A student interested in the auto industry may realize the importance of mathematics. Similarly, a student helping a public relations director prepare an advertising portfolio can see the need to improve his or her writing skills. Concepts learned in subject areas may take on new meanings as they are tested with people whose business depends on their application.

While developing academic skills, students are also learning about careers and how to deal with people in environments as different as the auto shop, the advertising agency, and the science laboratory. Theories and principles learned didactically are reinforced when students test them out through direct application. Furthermore, with community-based learning, students have opportunities to see how different skills and kinds of knowledge come together or interrelate.

There is a popular notion that "experience is the best teacher." This notion takes many forms, ranging from the random trial-and-error sort of experiences to the "learn by doing" exemplified by apprenticeship training. The result of these views, however, is that experience-based learning is often thought of as inefficient, or heavy on skills but light on understandings. These attitudes, stem from the view that experiential learning is mostly accidental and that formal instruction or "book learning" is somehow more valuable and definitely more prestigious. Certainly, experience-based learning activities in the community will produce a substantial amount of accidential learning. However, it is the carefully conceived and planned experience-based learning activities blended with the didactic/symbolic approaches that result in optimal learning.

WHAT IS THE THEORY UNDERLINING EXPERIENCE-BASED LEARNING? WHY AND HOW DOES IT WORK?

Many theories and models exist for explaining why one educational option might be preferable to another, but there is often insufficient knowledge based on research to justify choosing one option over another on empirical grounds. As a result, educators are often forced to make choices based on value positions, or practices are continued simply because they seem to meet student needs. Educators who make use of experience-based activities are convinced that the activities make a substantial contribution to learning and that there exists a credible and supporting rationale for them.

There have been many spokespersons for experiential learning and the history of programs in schools and colleges has been a long one. Perhaps John Dewey in the The School and Society, published in 1902, gave experiential learning its best reason for consideration as a methodology:

> Verbal memory can be trained in committing tasks, a certain discipline of the reasoning powers can be acquired through lessons in science and mathematics; but, after all, this is somewhat remote and shadowy compared with the training of attention and of judgement that is acquired in having to do things with a real motive behind and a real outcome ahead.[1]

While Dewey was an enthusiast for experiential learning, he cautioned that all experiences are not necessarily educative, and that to avoid "miseducative experiences" careful selection was necessary. Selection would normally be based on the learning and/or readiness status of the student and would be made primarily by teachers. It should be remembered that the important issue is not experiential versus didactic/symbolic learning, nor community-based learning versus classroom-based but rather of appropriate learning activities versus inappropriate or inadequate learning activities. In most cases "appropriate" will mean a mixture or blend of all kinds of learning. In fact, many educational researchers and practitioners maintain that the learning enterprise, to be complete, must include such a blend. David Kolb's model of learning, which he calls a "simple description of the learning cycle,"[2] illustrates how this might be so. Figure 1 displays his model.

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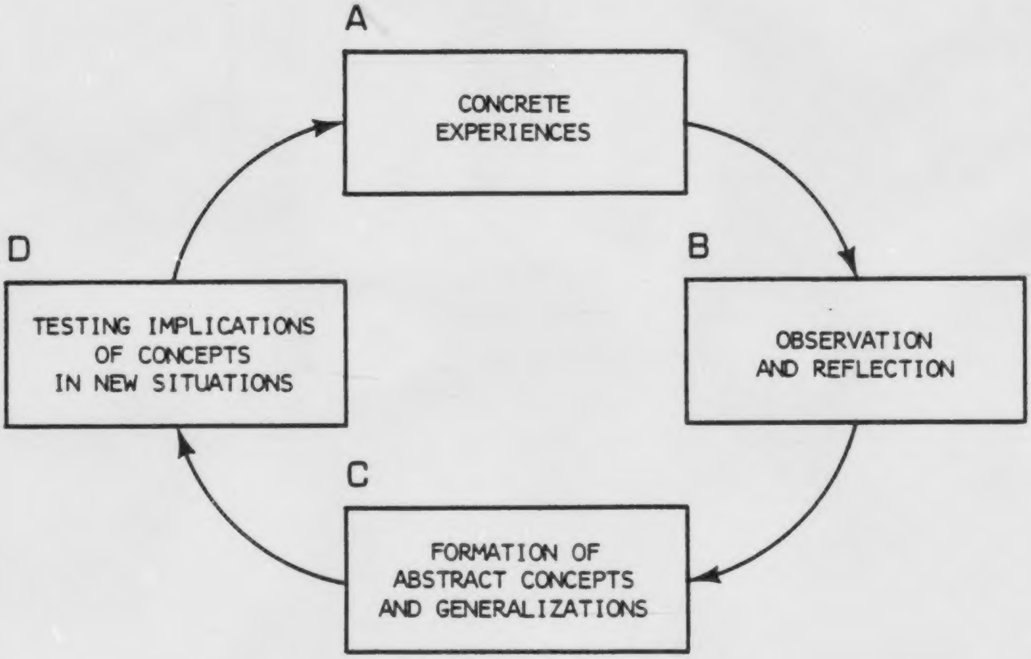
[1] John Dewey, The School and Society (Chicago: University of Chicago Press, 1902), p.11-12.

FIGURE 1
KOLB'S LEARNING CYCLE


A
CONCRETE EXPERIENCES
B
OBSERVATION AND REFLECTION
C
FORMATION OF ABSTRACT CONCEPTS AND GENERALIZATIONS
D
TESTING IMPLICATIONS OF CONCEPTS IN NEW SITUATIONS

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[2] David Kolb, Learning Style Inventory: Technical Manual (Boston: McBer Publishing Co., 1976).

Kolb describes the learning process in terms of four stages: (A) active, (B) passive, (C) abstract, and (D) concrete. These stages represent styles or modes of learning, and Kolb feels that people have different preferences among the modes. He suggests that no one mode is necessarily superior to another and that an effective learner can make use of any or all modes appropriate to a learning task.

Following this line of thought, educators need to help students develop each mode for maximum efficiency. In fact, to the extent that a particular learning mode is underdeveloped, Kolb argues, learning may be handicapped. Thus, in the model, experiential techniques are an essential part of the learning enterprise. Similarly, concrete experience (A) without adequate reflection (B), leading to concept formation (C) and selection of new experiences to further test concepts (D), will not lead to effective learning. The task of teachers is to provide quality experiences in conjunction with the opportunity to reflect, analyze, and build further on these experiences.

While Kolb's learning cycle theory has been cited as providing an explanation of "why" experiential learning is an important component of learning, the work of Chris Argyris and David Schon suggests "how" it works.[3]

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[3] Austin Doherty, "Toward a Theory of Undergraduate Experiential Learning," in Learning by Experience -- What, Why, How, eds. Pamela J. Tate and Morris T. Keeton (San Francisco: Jossey-Bass, 1978).

Argyris and Schon, in their study of graduate-level education, concluded that "the objective of the field experience is to learn to become more reflective under real time conditions so that effective theories of action can be created and tested."[4] Their analysis of how experience is translated into concepts led to the "theory of action." According to Argyris and Schon, the theory of action consists not simply of a theory about the subject or field under study, but in the learner's whole framework for engaging in the experience, including assumptions, expectations brought by the learner from past experiences, and the methods used by a learner to function in each new situation.

Argyris and Schon further distinguish between "espoused theory" and "theory-in-use." The former includes the values, behaviors, and analytical constructs that a teacher intern might describe when asked how he or she intends to work with a class of students. The theory-in-use includes the focus and all the principles that affect actual behavior during the teaching act.

The theory-in-use is usually inferred from an observation of what actually happens when checked against the espoused theory. Theories-in-use are contrasted with espoused theories over time. With reflection, the two theories should become more and more consistent. According to Argyris and Schon, field experiences enhance the learner's theoretical knowledge, process skills, and the ability to reflect on one's own behavior and modify it accordingly.

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[4] Chris Argyris and David Schon, Theory in Practice: Increasing Professional Effectiveness (San Francisco: Jossey-Bass, 1974).

Crucial to the process, according to Agyris and Schon, are: (1) availability of valid information from other persons, (2) free and informed choice on the learner's part for tasks to be undertaken, and (3) learner commitment to having the chosen task monitored by another. Since the learner must be willing to participate and critically evaluate his or her own performance, the supportive role of the monitor/observer is extremely important.

Argyris and Schon note that either real or simulated situations may be used and that the simulated type of experience has particular value in helping the learner develop "antecedent skills" for a later immersion in the field setting.

Doherty, in discussing the field-based undergraduate program at Alverno College (Milwaukee, Wisconsin) offers the following description:

> First, performance standards, while set by "authority," refer to criteria in the student's performance and are judged for effectiveness in the performance situation.
>
> Second, the focus is on refining learning abilities within the context of developing particular content skills. For example, while the content may be music, teaching, or nursing, the focus is also directed at developing the learner's powers of observation and reflection (modifying a theory in use).
>
> Third, the learner's involvement in making judgments is important. Even though, according to Doherty, standards may be imposed (both the criteria and the concept of effectiveness), the learner is evaluating his or her own behavior. Through such a process the learner can take responsibility for learning. The process, using a student as an example, might proceed as follows:

> A student selects goals and develops expectations for a learning situation. In stating expectations for his or her own behavior in the situation, the learner has stated an espoused theory. The activity engaged in is followed by a discussion and reflection on the learner's actual behavior and its meaning with the monitor/observer. In this latter stage, teachers, peers, and site personnel are potential resources. The learner's goals and derived criteria, of course, play the major role in determining the effectiveness of behavior and the level of competence developed by the learner. Finally, the learner takes the lead in selecting further experiences to continue the learning endeavor. The capability of a person to direct and assess his or her own long-range learning is the hoped for outcome of this process.[4a]

In this process the teacher's role is to mediate the process, ensuring that the steps are occurring and that the student is receiving the kind of support and direction suitable for the student's development.

A related set of ideas has been described by David Hunt as an outcome of a line of research on Conceptual Level (CL), a characteristic based on developmental personality theory.[5] CL describes persons on a developmental hierarchy of increasing conceptual complexity, self-responsibility, and independence. For a student, the developmental goal is learning how to learn in a wide variety of circumstances. For example, the student should be capable of directing his/her own learning in independent study, through working with others cooperatively in a group, as well as from a highly structured lecture. Thus, according to Hunt, the goal is to extend the student's repertory of learning styles.

[4a] Austin Doherty, in Learning by Experience, 1978.

[5] David Hunt, "Conceptual Level Theory and Research as Guides to Educational Practice," Interchange, VIII, 4 (1977-78).

WHEN IS A BLEND OR MIX OF EXPERIENTIAL AND SYMBOLIC LEARNING APPROPRIATE?

It was suggested earlier that a blending of experiential and symbolic technique is important and, perhaps, critical for most types of learning. The real problem for educators is determining an interesting and effective mix of both for the almost infinite variety of learning tasks. In thinking about the kinds of learning activities that are both interesting and effective, the following factors can be considered:

> Learner Characteristics: Substantial use of field-based learning activities usually places the learner in an environment without the normal amount of teacher support. Research on Conceptual Level (CL) of students suggests that low CL learners profit more from high structure and high CL learners profit more from low structure. This is not to suggest that experience-based activities should not be used for low CL students--only that additional teacher support in the form of supervision and decision-making involvement may be a necessary ingredient of the process.
>
> Staff Characteristics: Staff interest and capability in using experiential techniques are often contingent on such issues as a commitment to a discipline, field, or role, views concerning kinds of performance standards to be applied to a course, and the extent to which the teacher/learner role is open to modification.
>
> Content Requirements, Prerequisites, and Purpose: The nature of the subject area of course may also have a bearing on whether field-based experiences are acceptable. For example, is course content loosely defined and open to replanning or highly developed with considerable emphasis on a sequence of activities and an orderly progression through the sequence? While none of these conditions rules out experiential techniques, they may affect the willingness to experiment with field-based experiences.

WHAT'S THE TEACHER'S ROLE LIKE?

What teachers do in experience-based programs is not necessarily new or different. Effective teachers have always provided structure, support, and learning resources consistent with the nature of the learning enterprise. Effective teachers facilitate learning; they help it along through frequent interactions with students and the arrangement of appropriate learning environments.

Experience-based learning and the facilitative role of the teacher are not interdependent. One can exist without the other. But, juxtaposing experience-based procedures and certain facilitative teacher functions greatly enhances the benefits of both. This part of Book I will address questions often asked about the facilitative teacher's role.

The role of a teacher in most kinds of educational programs requires a wide range of skills and styles. The use of experience-based procedures increases the complexity of the task by requiring,in addition, a variety of roles. The teacher/facilitator is, for example:

- An authority with a certain amount of power over the student, e.g., the teacher may choose to control the total learning enterprise and has the right to evaluate the student's progress;
- An official representative of an academic organization that has specific rules and regulations, e.g., requirements for graduation, requirements for participation in the program which need to be communicated to the student by the teacher;
- An informed helper whose primary objective is to aid the development of a range of academic and personal skills;

- A resource person who has expert knowledge and may be recruited by the student to be a "consultant" on a specific issue;
- An examiner or evaluator of the student's products or assessor of the experiences which the student undergoes; and
- An individual with needs and feelings which he or she wishes to have respected by others, including students.

In interactions with the student any one of these roles may dominate depending upon such variables in the student's characteristics as:

a. Level of self-sufficiency, i.e., perceived ability of student to effectively manage his or her learning, solve his or her problem(s), overcome or cope with a conflict of values, needs and/or interests;

b. Extent of the student's participation in experiential activities; or

c. Number of requirements for graduation or certification still uncompleted by the student.

Teachers may be faced with mutiple student objectives among which there may be conflicts. If a teacher can respond more or less appropriately to the needs of the situation, that teacher is acting in a facilitative manner. A teacher may be directive or nondirective, may lead students or follow them, may coax, wheedle, or demand, may be solicitous or formal, make assignments or await the development of interests. Each of these behaviors can be either facilitative or inhibitive depending on the status of each of the variables above.

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HOW DOES A TEACHER DECIDE WHICH ROLE IS APPROPRIATE?

Whatever the situation, teacher decisions about the instructional process should always be guided by two key assumptions.

1. Every learner should be headed toward self-direction, i.e., responsibility for his or her learning. Decisions made about the instructional process should be made accordingly.

2. The teacher's success in selecting high quality learning activities is dependent on knowledge of each learner.

Student self-direction, responsibility, and quality learning can go hand-in-hand, and in fact, many educators insist that student control is the best assurance of quality learning. Such power, however, may not be appropriate for all students and in all situations. At times, conflict arises between assurance of quality learning on one hand and encouraging student self-direction on the other. Therefore, a teacher must balance the desirability of student control over the learning process with assurance of quality outcomes resulting from the process.

The teacher is faced with a distinct challenge--to learn a variety of strategies and use them selectively based on information gained from interactions with students. The desirable direction is toward learner responsibility--learner-directed educational programs. But the differences among learners and situational variables may dictate a multiplicity of teacher roles ranging from teacher-directed learning to primarily student-directed learning. The facilitative teacher must make judgments about the learner and then behave accordingly. Figure 2 presents a perspective of the range of judgments affecting decisions about the educational environment concerned.

Each entry in the left-hand column should be regarded as a concept representing a range of possibilities. The other three columns consist of two poles and a midpoint representing the range for each concept. How one views each of these concepts in a specific situation will shape teacher behavior and, of course, affect learner behavior in such instructional processes as goal setting, selection of learning activities, and evaluation.

FIGURE 2

DECISION CONTINUUM

Teacher's Judgments About	Teacher Directed	Interactive	Learner Directed
The learner's readiness for increased independence	Dependent, needs direction and control	Learner can become increasingly self-sufficient and self-directed	Independent, total learner responsibility is possible
Role of learner's experience	Cumulative, to be built on sequentially	Interactive and used as a resource for planning	Useful to learner in stimulating new interests
Appropriate focus of study	Subject and skill centered	Subject matter and experiences are complementary	Learner interests centered
Motivation for the learner	External rewards and punishments are needed	Learner increasingly self-motivated and controlled	Curiosity, internal incentives are adequate
Teacher's role	Controls, assigns, evaluates, disciplines	Facilitative, coordinative and flexible	Facilitator, consultant, responsive

WHAT FUNCTION OR FUNCTIONS DOES A TEACHER PERFORM?

Combining a "facilitative" role with experiential techniques results in a number of functions which need to be performed, particularly when community-based learning activities are used.

Three major functions should be performed. They include preparing a learning plan to guide the learning process, monitoring the process to ensure that progress is occurring, and assessing student progress and evaluating outcomes. These are basic to all teaching and ideally are accomplished with the learner--not for the learner. Each of these functions is briefly discussed below.

1. Planning

To the extent possible, planning is done with a student. There is a movement toward shared accountability. This approach assumes that commitment to learning is highest when the learner has selected or participated in the selection of goals.

A second assumption holds that planning does not really end--it continues as long as the teacher and student are engaged in a learning endeavor. There are, however, some outcomes of planning that are indicative of progress. For example, as a result of planning:

> A general picture of the student emerges that includes such information as the student's interests, preferences, maturity level, past achievements, relevant institutional requirements, and some notion of the student's learning style.

This information will be used to consider and select:

> Learning goals and objectives that are clearly stated, are possible to achieve, provide guidance for selecting learning activities, are written at an appropriate level of complexity, and are measurable.

In summary, a learning plan is an agreement between the teacher and the student about what and how learning is to occur.

2. Monitoring

Once the student is engaged in the learning activities, the teacher must "stay in touch." In addition to helping students identify, define, and solve problems, there is the most important function a teacher can serve in experiential education programs--that of helping the student reflect on and derive meaning from the experience. This includes such things as helping the student:

- Use an experience to further clarify an interest or value;
- Discover or recognize in the experience a relevance to his or her personal life as a source of motivation and further learning;
- Make functional linkages between theory and practice, between experiences in the community and academic coursework; and
- Derive from particular experiences general principles applicable in other circumstances.

3. Assessing Student Progress and Evaluating Products

Student progress is assessed in terms of criteria specified during planning. Like planning and monitoring, assessment of individual students is an ongoing activity. Based on observation, interviews, and other data gathering techniques, student progress is assessed, feedback given, strengths and deficiencies identified, credit or grades assigned, and when indicated, replanning occurs. Finally, the routine reporting of program outcomes is sometimes also a teacher's responsibility.

During the performance of each of these functions--planning, monitoring and assessing--teachers can offer learners the opportunity to become more independent and to participate in each stage of the learning process. It is through these functions that the teacher learns about the student and is able to choose appropriate activities for the learner at any point in the instructional process.

Instructional programs that differ even slightly from more traditional approaches or teachers whose patterns of activity differ from the more usual format are often viewed with curiosity or skepticism by colleagues who may be unfamiliar with the purposes of the newer approach. This suggests a fourth teacher function--orienting others. Reporting on or explaining an experience-based program to colleagues or other interested groups is not an unusual request. Being able to do so in a way that communicates the educational contributions of experience-based education and the facilitative role of teachers clearly and rationally is an asset of considerable worth.

WHO IS IN CONTROL OF THE LEARNING PROCESS?

A premise stated earlier was that every learner should be moving toward individual responsibility for learning. It is the teacher's responsibility to arrange the educational environment so that this movement is possible. The challenge is for teachers to permit and promote student responsibility in all phases of learning--planning what is to be learned, engaging actively in the process, and assessing that progress--consistent with the student's willingness and capability of handling the responsibility.

In programs which use out-of-class learning activities, more responsibility is automatically given to the student. They are on their own to a greater degree, away from the potential direction or supervision of the teacher. A teacher can, however, retain fairly strict control over the learning process, even in field-based learning activities, and thus have the flexibility to respond according to individual learners. When the particular teacher's behavior is appropriate to the student's instructional needs, facilitative teaching is occurring.

A related issue that helps differentiate the teacher's role concerning control has to do with the concept of mediation. This concept refers to processes by which educational influences are filtered, i.e., screened, interpreted, criticized, reinforced, etc. Such filtering actions for education imply that the teacher is involved to some degree in selecting what will be learned and how, explaining or analyzing concepts and experiences, judging or assessing progress, and extending or reinforcing what has been learned.[6] Mediation may be active or passive, critical or supportive, direct or indirect, frequent or occasional, proactive or reactive, and each of these styles may be appropriate at certain times with different learners.

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[6] Hope Jensen Leichter, "Families and Communities as Educators: Some Concepts of Relationship," Teachers College Record, LXXIX, 4 (May, 1978).

The teacher's adaptation to different learners is a most important skill, yet it is poorly understood. It requires that teachers adopt a problem-solving approach to working with learners. This means that while the teacher may form tentative conclusions about appropriate learning activities and roles, modifications may need to be made on the basis of new knowledge gained about the student.

The three major functions--planning, monitoring, and assessing--which the facilitative teacher performs with students may all be classified as efforts to mediate the learning process. These functions, the related tasks, and the particular styles chosen for their implementation lie at the heart of the facilitator role.

HOW IS A TEACHER'S TIME SPENT?

The previous section presented a brief discussion of what were described as the three primary functions of teaching: planning student learning programs, monitoring their progress, and assessing outcomes. Obviously, most teachers are usually engaged in one other function, that of presenting material or leading discussions about material. But teacher presentations are only one kind of learning activity. An educational program consisting mostly of teacher presentations could mean several things.

- The emphasis is on course content coverage;
- Individual differences among students is not a major concern; or
- Students are scheduled for only one 50-60 minute period daily for each course. Therefore, time available tends to prevent individualizing the planning or instructional process as well as out-of-school learning activities.

Ideally, the teacher's time would be a mixture of planning individually with students to select objectives and learning activities; preparing in-class activities; making presentations; leading discussions; monitoring student progress in the sense that students are helped to solve problems, modify activities, and reflect on progress; assessing student progress; and identifying and communicating with other learning resources outside the classroom.

For a class of students meeting one hour daily, the teacher is severely limited in what can be done with individual students or with community-based experiential activities unless, in the teacher's judgment, the students are quite mature, being able to work independently with little or no supervision. The use of classroom simulations, involving groups of students in their planning and conduct, may be the most effective way to build experiential techniques.

When the class period is increased to a two to three hour time period the options increase accordingly. Assume that an 11 - 12th grade economics class meets three times weekly for a two hour period. It is possible to make use of simulations, community-based experiential activities, and personalized planning, monitoring, and assessing. Most students at this age--16 to 18 years--are able to work and study independently, particularly if they have participated in planning their work. During any given class period some students can be at community sites working with a site resource person while others can be in class engaged in other activities, e.g., reading, writing reports, documenting their experiences, planning next steps, planning with other students for group activities, meeting with a teacher to plan for monitoring purposes, or assessment.

When community sites supplement classroom learning, one other task must be accomplished--that of identifying and orienting resource persons who are willing and able to spend some of their time with one or more students. In some school settings the teacher has this responsibility. However, when a school is making extensive use of community-based sites, a staff member to identify, orient, and coordinate the use of resource persons is desirable.

The extent to which an individual teacher can (1) make use of experience-based procedures and (2) perform the primary functions of planning, monitoring, and assessing individually with students depends to a great extent on the context. Some of the contextual factors include the amount of time available for students on a daily basis; how classes are scheduled; whether teachers can cooperatively plan and carry out the educational process, such as in team teaching; the availability of community sites with clearly specified learning activities to choose from; and institutional requirements (e.g., course requirements, student campus restrictions, unit or credit assignment policies) that might prevent certain kinds of experience-based activities.

WHAT ASSUMPTIONS ARE BEING MADE ABOUT THE LEARNING PROCESS?

Much of what educators do is done because of their own experience in schools and with teachers. Very little of what one experiences educationally can comfortably be said to have derived from any systematic body of research-based knowledge. The same is true for most of the recommendations contained herein. In addition to the rationale provided earlier, the following unproved, and in some cases untested, assumptions about experiential techniques and the facilitative role of teachers are offered.[7]

1. Experiential education procedures are motivators. Their main payoff is the enthusiasm generated for: (a) learning in general, (b) a subject area or discipline, such as history or math, (c) a career goal, or (d) a specific teacher or adult.

2. Experiential techniques lead learners to more sophisticated and appropriate inquiry. That is, the most important outcome is what happens after the experience is over: when learners question what they have done, or seen, or heard; when learners analyze and critique the experience in terms of their own knowledge and understanding of phenomena; when learners choose or design other experiences to substantiate or extend what was felt, learned, or believed.

3. Experiential procedures give participants a more integrated, coherent view of the world they live in.

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[7] Adapted and expanded from Gary Shirts, "An Inventory of Hunches About Simulations as Educational Tools," distributed by Simile II, Box 910, Del Mar, California, 92014, undated.

They help learners achieve a better sense of the interconnectedness and interdependence of the social system of which they are a part.

4. Participants have an improved opportunity to develop a variety of skills such as decision-making or communication.

5. Experience-based techniques provide participants with explict and real referents about ideas, concepts, and words used to describe human behavior. Such techniques provide a basis for helping learners express their own conceptual processes.

6. Experiential techniques act as forceful catalysts for personal growth of individuals. The well-documented high level of participant involvement leads participants to personal insights and discoveries, recognition of strengths and weaknesses, and an opportunity to balance cognitive growth with affective growth.

7. The teacher's role is to help learners make greater strides in acquiring new and important knowledge and skills. Becoming more personally responsible for learning results in more efficient and effective learning.

8. Learners need more, not less, help when the teacher role is aimed at increased learner responsibility. While seemingly paradoxical, self-directed learners need and seek more guidance from larger numbers of people than when in a primarily teacher-directed setting.

9. Learners will be better prepared to cope with personal and social problems and competing alternatives when the learning environment encourages self-direction.

SUMMARY

Experience-based learning involves the use of planned activities in which the student is doing something directly with the subject, problem, or issue being studied. The student has the opportunity to try out an idea, test a hypothesis, or acquire a skill.

Simulated learning activities, as well as community-based experiences, provide useful kinds of opportunities to supplement or enhance the learning enterprise in almost any subject area. For optimum benefit, experience-based activities ought to be: (1) carefully planned to achieve agreed upon outcomes, (2) structured to maximize the resources in the community, (3) directly related to the student's academic program, (4) personalized to student needs, interests, and activities, and (5) designed to foster independent learning.

Experience-based learning is meant to enhance rather than replace other forms of learning. If used well, together they will reinforce and extend concepts and aid in integrating thought and action. In fact, many researchers and teachers believe that without an experiential component, learning is incomplete.

The teacher's role in programs making use of experiential procedures is not necessarily new. The extent to which experience-based procedures are used to personalize learning activities for individual students will affect the role played by teachers. Generally, experiential procedures and personalization require the teacher to spend more time planning with students, monitoring their progress and assessing outcomes. The teacher's ability to appropriately merge or blend experiential learning procedures with more traditional classroom approaches is the key to successful instructional programs.

①

LEARNING STYLES

a. What is your own preferred learning style?

The READING section described David Kolb's model of learning, which consisted of four modes--concrete experiences, observation and reflection, formation of abstract concepts and generalizations, and testing the implications of these concepts and generalizations in new situations. While all four were deemed important, it was also suggested that the appropriate use of one or more of these modes might vary with the learning task.

The Learning Style Inventory (LSI)[1] was designed to assess how you see yourself as a learner in terms of these modes. This inventory is recommended to you and your colleagues. After self-administering and scoring, you may want to discuss the results with your colleagues.

b. How do you work with students having different learning styles?

Explain the purpose of the LSI to one or more students (or colleagues if students are not available). Ask them to take it, and discuss the outcomes and implications for their learning a task of their choice.

Ask yourself the following questions:

1. Which learning styles do you most prefer to work with? Why?

2. Which learning style do you least prefer to work with? Why?

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[1] Authored by David Kolb, this inventory may be ordered from McBer and Company, 137 Newbury Street, Boston, Massachusetts, 92116. The price of the self-scoring test and interpretation booklet is $2.00. Additional copies of the score sheets are $.25 each.

②

TEACHING STYLES

a. What is your teaching style?

1. For a subject matter area of your choice, list two or three knowledge or skill objectives to be mastered by students during a semester.

2. What approach have you used (or do you intend to use) in teaching this material?

3. Which learning style or modes does your selected approach accommodate?

4. Are there any other approaches or techniques that might be apppropriate? What are they and why do they seem appropriate?

b. How would you modify your teaching style?

1. What difficulties do you anticipate in making use of the techniques from #4 above and how could you handle them?

2. For your own subject area or situation, consider the pro's and con's of the following instructional techniques:

- simulation or role plays
- out-of-class group trips
- individual community placements for a period of time
- group projects and reports

Are there any you would choose not to use? Why?

WHAT KINDS OF QUESTIONS ARE OFTEN ASKED ABOUT EXPERIENCE-BASED EDUCATION?

③

The following questions are representative of those often asked by colleagues, the public, potential students, and governing boards.

Choose those that are the most interesting, and discuss them with colleagues. They will help serve as a review and an extension of Book I.

Some possible responses to these questions are offered in the APPENDIX section.

1. Since schools were set up to teach people things that they generally would not learn in the normal course of their daily lives, why send students back out into the community?

2. Given that neither public nor private agencies are structured to teach students, will there be a conflict between the goals of the organization and the educational goals of each student placed in that organization?

3. How can academic standards be maintained in an experience-based program?

4. How can experience-based learning be equivalent to coursework?

5. How can experience-based learning be measured?

6. Does experience-based learning give students too much control over their evaluation?

7. How can students be adequately supervised, if they are working out in the community?

8. Will students in community placements be isolated, both from other students and from a range of faculty input?

9. Can secondary students handle the responsibility of being on their own in the community for part of the school day?

10. How can teachers from more traditional experiences develop the skills necessary for using experience-based techniques?

11. Given the amount of time students might spend outside the classroom, to what extent can teachers maintain control over the students' learning experiences?

12. What assurance is there that the community resource people will be qualified to supervise significant portions of students' education?

13. What are the responsibilities of community resource people?

14. Given the extra work-time involved, why would anyone volunteer to be a resource person?

15. How much control will resource people have over selection of students working at that site and the nature of the work they will do there?

16. How can the resource person handle a conflict between commitment to students' education and commitment to the organization's productivity?

SELF-ASSESSMENT

a. What kinds of experience-based educational programs would you consider for your school?

Identify several types of programs at secondary or post-secondary institutions and arrange to visit, one or more of them. Discuss with the teachers of these programs your impressions of their appropriateness for your school.

b. At the present time, how do you feel about making use of experience-based procedures in your own setting?

1. Do you feel such procedures could be useful for most subject areas?

2. If you feel there are subject areas that are not appropriate, what are they and why?

3. Do you feel that you will make use of such procedures?

4. What kinds of techniques will you most likely use?

5. What difficulties, if any, do you anticipate?

MEDIA

In Addition to the Classroom, Far West Laboratory, 1855 Folsom Street, San Francisco, CA 94103, 1979.

Two 18-minute color videotapes showing the role of teachers in different secondary and post-secondary programs using experience-based techniques. The teacher functions of planning, monitoring and assessing students are illustrated.

The History of Experiential Learning, Council for Advancement of Experiential Learning, American City Building, Suite 212, Columbia, MD 21044.

A 12-minute slide-tape presentation describing the history, rationale, and benefits of experiential learning.

ORGANIZATIONS & ASSOCIATIONS

Council for the Advancement of Experiential Learning, Lakefront North, Suite 300, Columbia, MD 21044.

National Society for Internships and Experiential Education, 1735 I Street, N.W., Suite 601, Washington, D.C. 20006.

The Association for Experiential Education, Box 4625, Denver, Colorado 80204.

SELECTED ANNOTATED BIBLIOGRAPHY

This bibliography represents a variety of materials: some scholarly, others "popular;" some theoretical, others practical; and some lengthy, while others are brief. It is hoped that the annotations are sufficiently detailed to show how the reader might profitably sample its offerings.

Alexander, William M., ed. The Changing Secondary School Curriculum: Readings. New York: Holt, Rinehart and Winston, 1967. xvi, 450pp.

> A collection of varying theories and practices intended to help the reader draw his or her own conclusions on the issues presented, this book is structured in four parts. Part I discusses the factors influencing change in the secondary school curriculum. Parts II and III deal with recent and prospective changes. Part IV reflects the editor's position that continuing change, planned and systematic, is essential. Each part and chapter is prefaced by editorial comment.
>
> Shaw and Reid's "The Random Falls Idea" (pp. 399-408) briefly describes an experiment in relating school and community. Brickell's "The Dynamics of Educational Change" (pp. 436-444) and Miel's "Innovation and People" (pp. 455-458), are particularly relevant.

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*Some of the items in the bibliography were taken from Experiential Learning: An Annotated Literature Guide, 1978 supplement. Council for the Advancement of Experiential Learning (CAEL). American City Building, Suite 212, Columbia, MD. Those items are identified with the acronym (CAEL).

Argyris, Chris and Schon, Donald A. Theory in Practice: Increasing Professional Effectiveness. San Francisco: Jossey-Bass, 1978. xvi, 224pp.

> Though not directed only to the educator, Theory in Practice will help educators become more self-aware, more aware of others, and hence more effective.
>
> The authors distinguish espoused theories, which are used to justify and describe behavior, from theories-in-use, which are the operant theories of action. They examine how espoused theories and theories-in-use influence both personal and professional effectiveness and discuss strategies and environments for learning how to change.
>
> A good companion reading with this book is Chickering's "Developmental Change as a Major Outcome" in Keeton, et al., Experiential Learning, annotated below. Chickering, among other things, points out the implication of Argyris and Schon for assessment.

Arnold, D.S., and Others. Experiential Education: A New Direction for an Old Concept.

> Papers delivered under the Sponsorship of the Humanistic Psychology Division at the 81st Annual Convention of the American Psychological Association, August 1978. (ERIC #ED086079. EDRS price MF-$0.76 HC-$1.95 plus postage.)
>
> Three papers presented at the 1973 annual meeting of the American Psychological Association. Includes a brief overview, an introduction to the concept of experiential education, an exploration of three modes of experiential learning, a discussion of the application of the concept both to general and professional education, and a description of a successful three-year effort at the University of Kentucky to establish a university-wide, centrally cordinated program of experiential education. (CAEL)

Bremer, John and von Moschziker, Michael. The School Without Walls: Philadelphia's Parkway Program. New York: Holt, Rinehart and Winston, 1971. xiv, 296pp.

The introduction reviews how education in America became divorced from the community, the consequences and the subsequent need for change. The fundamental contention of this book is that no changes will be of any significance unless the social organization of education is totally changed, and the book goes on to present one such reorganization.

In Part One, The Parkway Program, chapters are devoted to social and administrative organization, curriculum, faculty, a student's day, evaluation, finance, community education, and history of the program. In Part Two, The Parkway Experience, three students, two interns, two faculty members, a unit head, a parent, and a journalist talk about Parkway. For those who want more information on this program, a bibliography and the Parkway Program brochure complete the book.

Cheren, M. A Manual for Program Advisors. Washington, D.C.: Campus-Free College, 1978.

Although designed to be an aid to program advisors in a specific campus-free nationwide program, the material is useful to advisors in any individualized post-secondary program. Examines methodology, issues, and problems involved in working with students in an individualized, experientially-based educational system. (CAEL)

Council on Social Work Education. The Dynamics of Field Instruction: Learning Through Doing. New York: Author, 1975. (Available for $3.50 from Council on Social Work Education, 345 E. 46th Street, New York, New York 10017. ERIC #ED121223. EDRS price MF-$0.83 plus postage. HC not available from EDRS.)

> These eleven papers cover experiences in a variety of graduate and undergraduate social work field settings. They examine in detail students in a rural setting, students in a field research project, students in a generic field instruction program, students in a community-based practicum, and students in a psychiatric setting. One paper details the development of a field instruction model for social administration and another examines a student-designed practicum. The role strain of both agency-based and school-based field instructors is also discussed. (CAEL)

Christensen, Paul R., and Johnson, James N. The Learning Coordinator: A Study of the Role. San Francisco: Far West Laboratory for Educational Research and Development, 1977. ERIC #ED138828, iv, 66pp.

> This study of the learning coordinator's role in four Experience-Based Career Education model programs on the secondary level draws some conclusions about the basis for selecting learning coordinators, and for planning appropriate LC training programs. It also provides a functional description of the learning coordinator's role.

Cross, K.P. Accent on Learning: Improving Instruction and Reshaping the Curriculum. San Francisco: Jossey-Bass, 1976.

> The author selects the most promising programs from over 1,000 studies of teaching, learning, and student development, and suggests practical ways they can be applied to the improvement of education. She also presents a new model of education that demands academic excellence yet accommodates student differences by reshaping curriculums and using new instructional strategies. (CAEL)

Dewey, John. Experience and Education. London: Collier Books, 1963, 91pp.

In 1938, more than two decades after Democracy and Education, Dewey wrote this essay to reformulate his ideas as a result of his intervening experience with the progressive schools and in light of the criticisms his theories had received. The succinct message herein, nonetheless, covers a broad spectrum. Beginning with a comparison of traditional and progressive education, Dewey goes on to tackle the need for a theory of experience, the criteria of experience, social control, the nature of freedom, the meaning of purpose, and progressive organization of subject matter. He concludes with a chapter entitled "Experience--the Means and Goal of Education."

Duley, John and Gordon, Sheila. College-Sponsored Experiental Learning --A CAEL Handbook. CAEL, American City Building, Suite 403, Columbia, MD 21044, 1977.

The fifth CAEL report is aimed at faculty and other professionals concerned with developing and evaluating college-level experiential learning programs. It sets out to encourage innovation, flexibility, diversity and quality in both development and assessment.

An initial chapter on theoretical reflections is graced by its own bibliography. The rest of the book follows the sequence of program development: developing program educational objectives; developing placement; selecting, preparing and placing students; monitoring students' learning; follow-up assessment and integration of learning; and program evaluation.

A list of references and appendices concerning resources for placement development, student preparation and advisement, and a sample performance analysis report conclude the book. A "checklist for guiding students' experiential learning" serves as an index to this volume and other CAEL publications. CAEL-6, Hadley Nesbitt's College-Sponsored Experiential Learning: A CAEL Student Guide, is the companion volume to this one.

Fantini, Mario D., ed. Alternative Education: A Source Book for Parents, Teachers, Students, and Administrators. New York: Anchor Books, 1976. xviii, 500pp.

The emphasis in this volume is on expanding the boundaries of public education. The 62 contributions are arranged into nine sections, each prefaced by the editor's comments.

Section I deals with background, philosophy, and criticism. Section II focuses on alternative schools outside the system. Section III shows how alternatives have entered the public school "mainstream." Section IV begins the discussion of planning and implementing public school alternatives, while Section VII picks up on the financial considerations, and Section VIII highlights the political considerations. Section V presents a case study of a district-wide alternative schools approach in the Minneapolis public schools. Section VI discusses evaluation, and Section IX concerns teacher preparation.

A bibliography of audio-visual and printed matter, organizations, and resource centers and an index conclude the book.

Farnham-Diggory, Sylvia. Cognitive Processes in Education: A Psychological Preparation for Teaching and Curriculum Development. New York: Harper & Row, 1972. xxxiv, 630pp.

Farnham-Diggory describes this as an educational psychology text with "real-world orientation and . . . emphasis on the newest principles." In her opinion, the most important theoretical concept is that of a person as a sampler of information. Traditional education, she maintains, does almost nothing to assist this natural mode of intellectual growth. Hence her text attempts to provide some of the background necessary for a sound educational revolution.

The book is organized into sections on cognitive development; basic systems of information processing; motivation, personality and culture; language; pictures, patterns and codes; and the creative process. The author recommends that they be read in order, as each builds on the others. Extensive references and index complete the book.

Ford, A.S., ed. Directions for Experimental Education in Higher Education: A Conference for Academic Administrators. Proceedings of a Conference for Academic Administrators, Berea College, Berea, Kentucky, November 1975. (ERIC #ED125496. EDRS price MF-$0.83 HC-$3.50 plus postage.)

> A wide variety of experiential programs that may be used to expand educational experiences is presented. These include service-learning internships; cooperative education; volunteer programs; field-based or independent study; work-study; and University Year for Action. The participants represented in these procedings outline the instructional characteristics of experiential learning; the rationales for combining work and learning; faculty involvement in experiential education; budgetary consequences of such programs; future directions for experiential programs; and some exemplary programs already in action. (CAEL)

Gordon, Thomas. T.E.T.--Teacher Effectiveness Training. New York: Peter H. Wyden, 1974. xviii, 366pp.

> Gordon, a clinical psychologist, author of the popular P.E.T.--Parent Effectiveness Training, and founder of a nation-wide system of parent effectiveness training programs, turns his attention to teachers. He examines defective teacher-student relationships, and discusses numerous other aspects of schooling including how to communicate with students, how to listen to them, how to handle their problems, how to modify the classroom environment to prevent problems, how to handle conflict in the classroom, how to make the school a better place to teach in, and how to work with parents. An annotated bibliography and index complete the book.

Graham, R. "Youth and Experiential Learning." Chapter IX in Youth: The Seventy-Fourth Yearbook of the National Society for the Study of Education. Chicago: University of Chicago Press, 1975.

> Evaluates "action learning" as promising but generally unsubstantiated in its effects. Purported efforts to match student characteristics to the learning situation have not systematically occurred or been effective when they have been attempted. The author argues for the "cognitive-developmental approach to education which defines the aim of education as the stimulation of the next step of development to fixed social values." The author provides an example of action-learning assignments which could be related to the social role-taking and moral judgment stages proposed by Selman and Kohlberg respectively. (CAEL)

Harmon, S.K. A Comparison of Lecture and Experiential Learning Models in Teaching Human Ecology (Doctoral dissertation, University of Utah, 1973). Dissertation Abstracts International, 1974, 34(10-B), 5036-5037.

> A report of a study designed to compare the knowledge and attitude test results of a selected group of students exposed to a traditional classroom approach with the knowledge and attitude test results of a selected group of students exposed to an experiential learning approach in a college-level human ecology course. The study involved 38 students enrolled in Biology 175 (Human Ecology) during the Summer Quarter, 1973, at the University of Utah. Seventeen of the students were randomly assigned to an experimental group and were exposed to a four-day experiential learning model only. The remaining students were exposed to a traditional classroom model. The author concludes: 1) Both courses appeared to be effective modalities in increasing knowledge of selected concepts in human ecology within groups. 2) The rate at which student knowledge of selected concepts in human ecology increased appeared to be greater in the traditional classrooom course than in the four-day experiential course. 3) Both courses appeared to be effective in developing positive attitudes toward selected problems in human ecology. (CAEL)

Heermann, B.C. Experiential Learning in the Community College (Topical Paper No. 63). Los Angeles: ERIC Clearinghouse for Junior Colleges, University of California, 1977. (ERIC #ED140909. EDRS price MF-$0.83 HC-$4.67 plus postage.)

This monograph argues the need for incorporating experiential learning of many types into two-year college education. Several examples are used to illustrate the essential components of sponsored experiential programs and a detailed discussion on recognition, assessment, and crediting nonsponsored experiential learning is given. Specific requirements for a successful, sponsored-learning program include, but are not limited to, careful planning, systems design, energy, enthusiasm, and the knowledge, skills, attitudes, and support of faculty, counselors, administrators, and other participants. The College Without Walls at Sinclair Community College (Ohio) is described to illustrate the operation of a comprehensive experiential learning program. Experiential learning assessment forms are appended and a bibliography is included. (CAEL)

Ingalls, John D. A Trainers Guide to Andragogy: Its Concepts, Experience and Application. Washington, D.C.: U.S. Social and Rehabilitation Service, 1973. viii, 242pp.

This volume has been described as the most comprehensive to date in bringing together the new concepts and techniques of adult education and showing how they can be applied to the training of professionals for the Social and Rehabilitation Service.

This revised edition is organized into six chapters on concepts, six on experience, and two on application. An annotated bibliography is divided into sections on science and philosophy, education and psychology, and group process and organizational development. A short list of additional references is appended.

Keeton, Morris, T., et al. Experiential Learning: Rationale, Characteristics, and Assessment. San Francisco: Jossey-Bass, 1977. xxx, 266pp.

A distillation of theoretical papers commissioned by the CAEL Steering Committee to illuminate the practical work of CAEL. Independent interpretations, rather than a prescriptive credo, they are aimed at a broad audience of students, faculty, administrators, and educational policymakers.

Part One concerns the history, present conditions, and future of post-secondary learning options and credentials, especially the role of experiential learning. Part Two analyzes experiential learning, and Part Three addresses both the state of the art in assessment of experiential learning and possible avenues of improvement. Four priority topics are reflected in the papers: within learning objectives, interpersonal skills and personal development; within learning arenas, the sites and setting of work experience; within instrumentation and methodology, the portfolio as a tool of assessment; within assessors, the use of expert judgment in assessment.

Two appendices concern current CAEL publications and CAEL committees, and a bibliography and index conclude the book. The CAEL publications are presented in a useful bibliographic essay format.

Knowles, Malcolm. The Adult Learner: A Neglected Species. Houston: Gulf, 1973. x, 198pp.

This concise, lively book, addressed to human resources developers, is billed by the author as "a trip up the Amazon of educational psychology to the jungle of learning theory." It is organized into chapters on the strange world of learning theory, theories of learning based on studies of animals and children, theories of learning based on studies of adults, theories of teaching, and applying theories of learning and teaching to human resources development. Knowles points out that most adult learning theory is based on theories of child learning, which are in turn based on studies of animal learning. Reviewing the traditional theories about learning, he describes the traditional teaching derived from them. Discussing the emergent theories of adult learning based on the characteristics of adults themselves, he then relates the new teaching processes derived from them.

There are a number of appendices, a bibliography, and an index.

Kolb, David A. and Fry, Ronald. "Towards an Applied Theory of Experiential Learning" in Cooper, Gary L., ed. Theories of Group Processes. London: John Wiley & Sons, 1975. Pp. 33-57.

> Kolb and Fry outline the experiential learning process, then devote most of their attention to discussing four implications of that process: (1) the integration of cognitive and socio-emotional perspectives on learning; (2) the role of individual differences in learning style; (3) the concept of growth and development inherent in the process; and (4) a model of learning environments commensurate with the process. They present evidence that individual learning styles influence both the individual's preference for certain educational formats and educational content.
>
> This essay facilitates an understanding of the rationale for experiential learning, as well as an understanding of why some students will prefer and do better in it than others.

McClure, Larry, et al. Experience-Based Learning: How to Make the Community Your Classroom. Portland: Northwest Regional Educational Laboratory, 1977. xiv, 246pp.

> The authors present tested procedures in an orderly and clear fashion. Chapter 1 defines experience-based learning and, as the authors themselves say, may be useful in helping persuade others of its value. Chapter 2 suggests techniques that can be used separately or together to structure student learning. Chapter 3 offers ways to analyze community resources for their learning potential, and Chapter 5 tells how to actually develop and use these resources. Chapter 4 describes a procedure for planning with students, and Chapter 6 gives suggestions for administering the process.
>
> The appendices describe 25 student projects that worked, present both an annotated and an unannotated bibliography, and sketch supplementary materials available from the Laboratory. The guide is indexed.

Milton, O. Teaching or Learning? Washington, D.C.: American Association for Higher Education, 1971. (Available from Publications Department, American Association for Higher Education, One Dupont Circle, Suite 780, Washington, D.C. 20036. ERIC Document Reproduction Service #ED053685. EDRS price MF-$0.76 HC-$1.58 plus postage.)

A summary of research on teaching and learning. Shows that most studies on teaching methods conclude that there are no significant differences between the various teaching methods and student achievement because investigators have concentrated on teaching and have ignored learning and the learner. The research omits investigations of what courses and subject matter areas promote critical thinking and a spirit of inquiry, and how students can be helped to become independent learners. One of the best examples of a new approach for both conceptualizing the issues and investigating them is the Instructional Gestalt. Many of the recently introduced approaches to instruction can be grounded into three categories: 1) personalized, individualized to process instruction; 2) experiential learning; and 3) acceleration programs. Results of this recent research point out that the role of the instructors must be altered and broadened. There can be a dramatic decrease in dispensing content and lecturing in the classroom without any decrease in the quality of learning. (CAEL)

Postman, Neil, and Weingartner, Charles. Teaching as a Subversive Activity. New York: Delacorte Press, 1969. xviii, 220pp.

The thesis of this book is that change is the most striking characteristic of the world we live in and that our educational system has not yet recognized this fact. The abilities and attitudes required to cope with change are of the highest priority, the authors continue, and schools can be designed to meet this need. They draw on many contemporary insights outside the realm of traditional education to suggest strategies of redesign.

The chapter titles in this provocative book reflect the authors' approach: Crap Detecting; The Medium is the Message, Of Course; The Inquiry Method; Pursuing Relevance; What's Worth Knowing?; Meaning Making; Languaging; New Teachers; City Schools; New Languages: The Media; Two Alternatives; So What Do You Do Now?; and Strategies for Survival.

Rogers, Carl R. On Becoming a Person: A Therapist's View of Psychotherapy. Boston: Houghton Mifflin Sentry Edition, 1961. x, 420pp.

The 21 papers in this volume are selected from the author's books and articles written between 1951 and 1961. They are intended for the intelligent layperson as well as the professional. Each paper is prefaced by the author's remarks, establishing its context. Together, the papers have been organized to portray a unified and developing theme from the highly personal to the larger social significance.

Of special interest in Part IV, "What Are the Implications for Learning?" are: Chapter 13, "Personal Thoughts on Teaching and Learning;" Chapter 14, "Significant Learning: In Therapy and in Education;" and Chapter 15, "Student-Oriented Teaching as Experienced by a Participant." Those interested in pursuing Rogers' ideas further will find the chronological bibliography of his works, 1930-1960, most helpful.

There is an index.

Sexton, R. Experiental Education and Community Involvement Practices at the Postsecondary Level: Implications for Career Education. (Report No.: P00760303) Washington, D.C.: Office of Career Education, U.S. Department of Health, Education, & Welfare, 1976. (ERIC #ED138771. EDRS price MF-$0.83 HC-$3.50 plus postage.)

Four themes are developed based on the premise that there is substantial correlation between the goals and objectives of career education and experiential education (learning activities outside the normal classroom): 1) a typology of experiential education and community involvement practices; 2) an overview of selected exemplary experiential education and community involvement practices and programs; 3) critical issues of experiential education as they relate to career education; and 4) recommendations for federal activity to enhance experiential education as it relates to career education. Major types of experiential education discussed are cooperative education, internships (preprofessional and general education), field experience, cross-cultural field experience, policy research experiences, and national youth service. The following critical areas are discussed and provide the rationale for the recommendations made: 1) academic issues involving the effectiveness of academic supervision, awarding academic credit, appropriate compensation for faculty who supervise students, and the appropriateness of financial compensation for students participating in experiential education activities; 2) limited opportunities in the world-of-work; and 3) the disadvantaged student. (CAEL)

Skinner, B.F. Walden Two. New York: Macmillan Paperbacks, 1962. 320pp.

This fictional outline of a modern utopia has been a center of controversy ever since its original publication in 1948. Set in the United States, it pictures a society in which human problems are solved by a scientific technology of human conduct. Chapters 12-15 especially concern education.

Tyler, Ralph W. Basic Principles of Curriculum and Instruction. Chicago: University of Chicago Press, 1949. vi, 128pp.

This book is not a textbook or a manual for curriculum construction, but rather an outline of one way of viewing an instructional program as a functioning instrument of education. The reader is encouraged to examine other ways of viewing and to develop his or her own conception.

Basic Principles is organized around four fundamental questions: What educational purposes should the school seek to attain? What educational experiences can be provided that are likely to attain these purposes? How can these educational experiences be effectively organized? How can we determine whether these purposes are being attained? A fifth section of the book discusses how a school or college staff may work on curriculum building.

Vermilye, Dyckman W., ed. Relating Work and Education. San Francisco: Jossey-Bass, 1977. xxii, 282pp.

A collection of 24 papers addressing the interrelationship of work and education, this book is divided into sections entitled: "Meanings;" "Relating Work to Education;" "Relating Education to Work;" "The Marketplace;" and "Making People Matter." Most of the papers are short and unencumbered by footnotes. Contributors are identified, and there is an index.

James O'Toole's introductory essay sets forth his own conclusions from reading these papers, i.e., that the purpose of higher education should be to prepare people to work on the emerging, systemic problems that beset society, that such people must be capable of divergent and holistic thinking about alternative solutions to social problems, and that setting the right goals is the first critical step. Programs, processes, pedagogy and curricula will follow.

Readers will be provoked to draw their own conclusions on this macroscopic level.

Witham, W.F., Jr. "Can Experiential Education be Compatible with the Liberal Arts Curriculum?" The Little Forum, 1977, 1, 4-6.

Argues that experiential education can be integrated with a traditional liberal arts curriculum and still meet the twofold objective of protecting the integrity of contemporary society. The article emphasizes the values assessment role of experiential education. (CAEL)

POSSIBLE RESPONSES TO QUESTIONS ABOUT EXPERIENCE-BASED EDUCATION

1. Since schools were set up to teach people things that they generally would not learn in the normal course of their daily lives, why send students back out into the community?

    - Education is seen by many as the responsibility and the concern of the whole community--this kind of education may contribute to solving some of the current social problems by breaking down traditional barriers.
    - It makes use of the variety of resources already existing in the community.
    - "The community" is not an undifferentiated mass--experiential education may help students learn about aspects of the community (including other jobs, other cultures, etc.) that are not their own.
    - Experiential education provides a structured exposure to the community, in which the students' everyday experiences are linked to academic principles.

2. Given that neither public nor private agencies are structured to teach students, will there be a conflict between the goals of the organization and the educational goals of each student placed in that organization?

    - The organizations are carefully pre-selected.
    - Students will learn to acquire education even when it's not handed directly to them.
    - There is educational value in perceiving the differences between academic models and the real world, even when these differences make learning more difficult.

3. How can academic standards be maintained in an experience-based program?

   - State laws and institutional requirements concerning graduation, grades, and credits are not changed. Making use of experiential techniques just changes the way in which standards are met.
   - Because they may not have standardized curricula, programs using experiential techniques require a clearer definition of education goals at all stages of the process.
   - Increased credibility can be obtained by involving respected evaluators in each field of learning.
   - All education programs depend on careful selection of high-quality teachers and careful monitoring by concerned administrators.
   - Because a number of people share the job of evaluating each student (e.g., teachers, peers, site personnel, administrators), the maintenance of standards is a shared concern, with a built-in system of checks and balances.

4. How can experience-based learning be equivalent to coursework?

   - Experiential learning is not intended to be equivalent to coursework--it enhances it, offering new options and providing new types of learning.
   - Although the importance of a standard syllabus is lessened, it often goes beyond standard coursework in terms of the kinds of learning it provides--planning, self-assessment, problem-solving, communication skills, the ability to observe and learn from observation, practical skills, the ability to deal with a diversity of people and values and to react positively in conflict situations, and the ability to make decisions.
   - It is based on individual learner goals and outcomes rather than on the need for control and uniformity.

5. How can experience-based learning be measured?

- Experiential learning can be measured in terms of the preliminary statement of goals, designation of learning activities, specification of products or other indicators of achievement, setting of due dates and methods of evaluation.
- Documentation of experiential learning can take many forms, including journals, written or oral evaluations by teachers and site personnel, research papers, demonstrations of specific skills, and standard tests of knowledge.
- The measurement process is really part of the learning process, because measurement techniques appropriate to the particular experience get defined in the planning phase. Centralized review of measurement techniques will ensure a coherent set of standards.

6. Does experience-based learning give students too much control over their evaluation?

- A certain amount of student control is desirable, since control implies responsibility.
- Each student is part of a team of people involved in the evaluation process.
- Teachers can maintain as much control as is desirable and educationally sound.

7. How can students be adequately supervised, if they are working out in the community?

   - Teachers should monitor student activities at frequent intervals. This monitoring should include contact with students in groups and individually, regular calls to resource people at the community site, making sure that project plans are on file and that activities are moving at a pace that will result in student credit at the agreed-upon due dates.
   - Adequate supervision is ensured by the fact that both teachers and site personnel are overseeing the students' progress.
   - Students should have individually designed schedules indicating what is to be accomplished in a given period of time.

8. Will students in community placements be isolated, both from other students and from a range of faculty input?

   - It is important that individualized learning not turn into isolated learning. A danger of the one-to-one learning situation is that a single faculty member can impose his or her opinions on the students' education.
   - There are a number of ways to avoid this problem, including frequent group meetings to supplement individual tutorials, seminars with a range of teachers, centralized review of student plans and programs, contact between students and other professionals (such as counselors), use of a number of teachers for different study plans in a single student's program, and perhaps most importantly, group projects that emphasize cooperation goals.

9. Can secondary students handle the responsibility of being on their own in the community for part of the school day?

   - A major benefit of experiential learning in the community is that it requires students to structure their own time. Since credit is given only for skills learned and tasks accomplished, rather than for merely putting in time, students soon learn to use their time effectively.

   - Despite the decrease in supervision, students receive substantial support from teachers, community resource personnel, and other professionals. In some cases--depending on the nature of the community placement--the students' day may be even more structured than it would be in a classroom.

   - Some students may indeed respond to the experiential structure better than others, thus advance diagnosis of students' learning styles is important in such programs.

10. How can teachers from more traditional experiences develop the skills necessary for using experience-based techniques?

    - Due to the fact that experiential education is becoming increasingly acknowledged as an important element in education, training opportunities are also increasing.

    - Using experiential procedures builds on many of the skills teachers use in more traditional programs, including giving tutorials, assessing individual student abilities, helping students find information sources, asking questions, and teaching students how to abstract general principles from particular experiences.

    - Since teachers are part of a larger network of people involved with the students' learning--site personnel, counselors, administrators, and other teachers--the skills required for experiential teaching are provided in a number of different ways, and no single individual needs to have all the skills.

11. Given the amount of time students might spend outside the classroom, to what extent can teachers maintain control over the students' learning experiences?

    - The idea that classroom faculty have total control over their students' learning may well be a myth. But, because of the one-to-one contact teachers in experiential programs have with their students, they are likely to have more real control over learning (as differentiated from discipline).

    - Teachers should have significant input in all phases of planning, monitoring, and evaluation.

12. What assurance is there that the community resource people will be qualified to supervise significant portions of students' education?

    - Resource people, who are carefully pre-selected, have demonstrated competence in their areas of endeavor. They should receive a certain amount of orientation and training. Over time, a file of competent resource people who have proved helpful in the past should be developed.

    - Resource people do not have to serve the same function as teachers. They do not deal with the students' education as a whole. They are provided with a support system of teachers, administrators, counselors, and so on, from whom they receive both assistance and feedback.

13. What are the responsibilities of community resource people?

    - They should offer students a broad exposure to the work-site by giving background on the organization's aims, introducing them to other employees, giving them different tasks to perform and assisting with project aims.

    - They should provide structure.

    - They should provide opportunity for feedback from students and be willing to discuss their own training and career background.

    - They should allow time for contacts with teachers.

    - They should orient students to their place of work.

    - They should evaluate student performance at the site.

14. Given the extra work-time involved, why would anyone volunteer to be a resource person?

- They are generally people who already have an interest in education.
- Favorable public relations is a by-product.
- Any kind of apprenticeship program is essentially an investment in the organization's own future.
- By discussing their own work with students, site people gain an opportunity to examine their own roles in the organization and their long-range career histories.

15. How much control will resource people have over selection of students working at that site and the nature of the work they will do there?

- Both resource people and students should have a chance to determine whether the placement is mutually acceptable.
- Resource people should be involved as extensively as possible with students and teachers in the planning and orientation phases.

16. How can the resource person handle a conflict between commitment to student's education and commitment to the organization's productivity?

- It is important to determine whether the conflict is due to individual differences with a student or the overall structure of the placement. If the conflict is personal, it should be dealt with by conferences involving the student, the teacher, and the resource person. If the conflict is structural, it can only be avoided by proper orientation of the resource person in advance of a student's placement.

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BOOK II

Planning with Students

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ACKNOWLEDGMENTS

PREFACE

This Book, Planning with Students, is part of a set of staff development materials consisting of four Books, a training Coordinator's Handbook and two 18-minute videotapes titled In Addition to the Classroom. The materials are designed for use in either pre-service or in-service staff development programs.

ABOUT THE MATERIALS

Contents

The four books in the staff development series are: Book I--Overview to Experience-Based Learning and the Facilitative Role of the Teacher, Book II--Planning with Students, Book III--Monitoring Student Progress, and Book IV--Evaluating Student Progress. Together, they present ways to improve the training process in secondary and post-secondary instructional programs and courses, dealing specifically with why and how experiential learning activities might be integrated into instructional programs or courses and how the teacher's role might be modified accordingly. Each book is comprised of reading material that introduces concepts about and procedures for experience-based training and corresponding teacher functions, guided activities to allow further exploration by trainees, and an annotated bibliography of selected source material to further stimulate the reader.

The videotapes, In Addition to the Classroom, Part I and II, describe three types of experience-based programs or activities: secondary career exploration, post-secondary internship, and a classroom-based activity. These sample programs outline some of the general characteristics of experience-based learning and illustrate the facilitative teacher functions of planning, monitoring, and evaluating.

Rationale

The materials reflect a commitment to three general assumptions about about the learning process:

- Learners should be moving toward increased responsibility for planning, decision-making, carrying out instructional decisions, and evaluating their own education. Doing so capitalizes on students' interests as well as on their potential to be self-directed in learning.
- Students vary in the ways in which learning is most efficient and effective and should have alternative learning activities and resources from which to select.
- Going beyond symbolic learning methods (reading, hearing and talking about phenomena) to include experience-based techniques (role-playing, simulations, and practice in real contexts, such as the community) enhances the quality of education.

The materials are designed to help teachers create instructional programs or courses that are consistent with these three assumptions.

Audience

Teachers who are working or anticipate working in secondary or post-secondary institutions are the intended audience. Since the materials are introductory, they will be particularly useful to both those training to become teachers and experienced teachers who are yet unfamiliar with experiential techniques (classroom or community-based). Furthermore, the materials are not directed at any one subject area, discipline, or course. Whether trainees plan to teach mathematics, history, English, psychology, chemistry, woodshop, or fire-prevention, experience-based techniques are applicable and these materials can be used or adapted.

Intended Benefits for Trainees

The materials are intended to provide trainees with:

- An introductory knowledge about experience-based learning;
- An introductory knowledge about the teacher's role as a facilitator;
- Opportunities to practice and develop skills and perspectives concerning the design and use of experience-based learning activities; and
- Opportunities to practice and develop skills and perspectives concerning certain role functions such as planning, monitoring, and evaluating student progress.

How Materials Can Be Used

Individual trainees can use the books by simply omitting all activities requiring group interaction. However, an effective method is to form a voluntary group and have a training coordinator available to schedule, make arrangements, assist participants to reflect on experiences, lead discussions, and to help assess individual progress. Group interaction is believed to be extremely important to the learning enterprise.

The books may be used selectively in a workshop of several days duration or in a course extending over several weeks. The latter arrangement is recommended, since the extended period permits participants to engage in outside-of-class or off-campus activities and allows time for the participants to reflect on experiences and, when appropriate, to practice or apply skills.

Trainees should also keep a notebook or journal recording their activities, ideas, and reactions during training. Such a record may be a useful tool for later reference when working with students or orienting other educators to experiential learning procedures.

In Addition to the Classroom is designed to orient trainees to experience-based learning as well as to serve as a stimulant for discussion concerning teacher functions.

WHAT KIND OF PLANNING IS NEEDED FOR EXPERIENCE-BASED LEARNING?

In discussing the type of planning needed for experience-based learning it is important to examine two aspects of planning: the product or the plan itself and the process--the means by which the plan is produced.

There are many different kinds of learning plans as well as a variety of approaches to the process of planning with students. Both the plan and the process will be influenced by student needs or interests, subject matter dictates, and institutional requirements. The plan may be for an individual student or for a group; it may be for six weeks or a semester; it may describe a classroom-based project or a field internship. However, while the nature of the plan may vary, certain principles of planning are advocated here that are suitable for any of the above situations.

1. The plan will reflect the student's needs, interests, and learning style.
2. The teacher will involve the student(s) in the planning process.
3. The plan will contain a blueprint for action--a series of learning activities that not only reflects the student's interests but also challenges the student and offers an experience-based component.
4. The plan may need to be revised.
5. The plan will provide the basis for later monitoring and evaluation.

The specific components of a learning plan will be described later in this section, together with a checklist for evaluating a completed plan.

The plan or learning contract is only one of the intended outcomes of the teacher/student planning process. It is important, especially in experience-based programs, not to overlook the potential of the process itself as a learning experience for the student. This interaction with the teacher gives the student the opportunity to establish personal contact with the teacher early in the course; to question his or her own needs and interests; to participate in the selection of goals, objectives, and learning activities for the project or placement; and to understand his or her role and responsibilities in this type of learning enterprise.

WHO DOES THE PLANNING?

What are the roles and responsibilities of both teacher and student in creating a learning plan? Who creates the learning objectives and activities, sets the schedule, and specifies the products or outcomes? If the teacher involves the students in planning, will the teacher lose control of the direction or outcomes of the class?

All of these questions have to do with control. The answers depend on such factors as the learner's age and maturity, course content, and the learning environment or context.

If control of planning is considered in terms of four instructional variables--general purposes, specific objectives, learning activities and resources, and evaluation--several instances of shared control of planning can be illustrated using the following matrix.

VARIABLE CONTROL BY	PURPOSES	OBJECTIVES	ACTIVITIES/ RESOURCES	EVALUATION
INSTITUTION				
TEACHER				
LEARNER				

Ideally learners will be involved in the process of determining some or all of these variables. They may not have primary responsibility for selection of the purposes or outcome, but they do have a chance to offer input to the plan. In experience-based learning it is desirable to move toward learner control of these variables of instruction as the learner demonstrates the capacity to assume more responsibility for his or her own learning.

Implementing this notion of shared control of the planning process will require flexibility on the part of the facilitative teacher in dealing with individual students. Not all students will have equal maturity and experience. The teacher will need to assess the student's ability to share control of planning in terms of interest and willingness as well as background and experience. Some examples follow.

SITUATION A: INDIVIDUAL PROJECTS IN AMERICAN HISTORY

PURPOSES and OBJECTIVES are determined by the teacher. The teacher and the learner(s) select the learning ACTIVITIES and RESOURCES that will fulfill these objectives. The type of EVALUATION is prescribed by the institution.

VARIABLE CONTROL BY	PURPOSES	OBJECTIVES	ACTIVITIES/ RESOURCES	EVALUATION
INSTITUTION				X
TEACHER	X	X	X	
LEARNER			X	

SITUATION B: CLASS UNIT IN JOURNALISM

The PURPOSES, learning ACTIVITIES, and possible RESOURCES are offered by the teacher. Learners work together or with the teacher to formulate the specific OBJECTIVES of the project as well as scheduling and determining the product for EVALUATION.

VARIABLE CONTROL BY	PURPOSES	OBJECTIVES	ACTIVITIES/ RESOURCES	EVALUATION
INSTITUTION				
TEACHER	X	X	X	X
LEARNER		X		X

SITUATION C: DEVELOPMENTAL PSYCHOLOGY COURSE WITH FIELD-BASED COMPONENT

The PURPOSE of the course or project is determined by the teacher. The teacher and learner(s) share the planning of the OBJECTIVES and ACTIVITIES and select the RESOURCES and EVALUATION mode together.

VARIABLE / CONTROL BY	PURPOSES	OBJECTIVES	ACTIVITIES/ RESOURCES	EVALUATION
INSTITUTION				
TEACHER	X	X	X	X
LEARNER		X	X	X

HOW DO YOU INDIVIDUALIZE PLANNING FOR A GROUP PROJECT?

As stated earlier, one of the goals of experience-based learning is to personalize the learning process as much as possible. In planning an individual project or a field placement, the plan is created during a meeting with the student. Planning an experience-based group project, however, requires a different approach.

How can a teacher working with a group of students be responsive to individual needs and interests in the process of creating a learning plan for the group? A classroom-based group project such as a simulation, role play, or performance will offer a variety of roles for students to play in order to make a successful presentation. The responsibility for these different tasks can be determined by the students themselves. That is, while the PURPOSES, OBJECTIVES, and even the ACTIVITY itself may be determined by the teacher, the students can select a part of the activity to participate in, suggest and explore RESOURCES on their own, and participate in the EVALUATION of the event.

EXAMPLE: PLANNING A MOCK TRIAL WITH SPEECH COMMUNICATION CLASS

The PURPOSE, OBJECTIVES, and nature of the ACTIVITY (simulated trial scene) is specified by the teacher. The specific topic of the trial is selected by the students together with the individual roles they will play. The details of the learning ACTIVITIES as well as the RESOURCES to utilize are outlined by the students. The EVALUATION is done individually by the teacher and also by peers in a group session.

VARIABLE / CONTROL BY	PURPOSES	OBJECTIVES	ACTIVITIES/ RESOURCES	EVALUATION
INSTITUTION				
TEACHER	X	X	X	X
LEARNER			X	X

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The planning of an activity such as this one is actually part of the learning process for students in this course. It does involve classtime but has the advantage of:

1. Testing students' understanding of the objectives;
2. Increasing student motivation by incorporating their interests into the plan;
3. Personalizing at least a part of the learning plan;
4. Encouraging students to suggest and pursue resources on their own; and
5. Helping the student focus on his or her own interest and at the same time be responsible to the group.

WHAT ARE THE COMPONENTS OF AN EXPERIENCE-BASED PLAN?

The learning plan can serve several purposes: (1) a record of the student's intended activities, (2) a guide for monitoring or replanning, (3) a basis for evaluation. The content of the plan will vary according to the nature of the learning enterprise--its scope, duration, kinds of resources, etc.

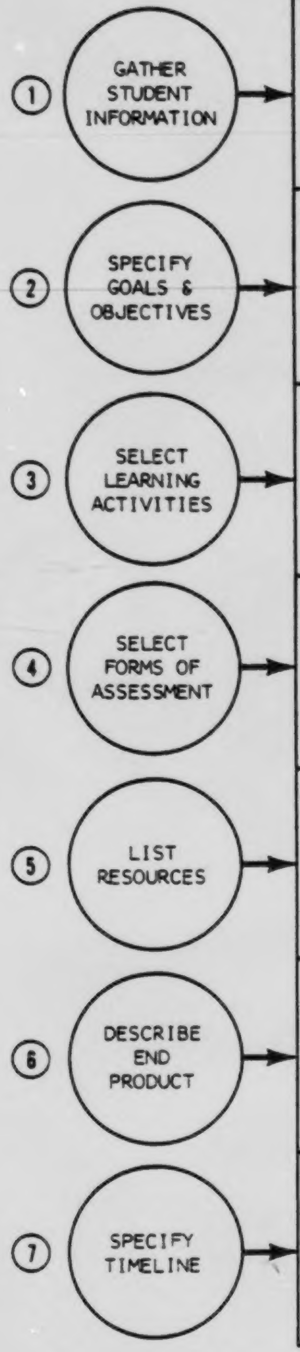
In all situations where a plan is used, the primary function is to guide the learning of the student. In determining the information required for completing a plan, the teacher should ask: "What information or specifications will help guide the student's learning?" What is needed to offer both initial direction and a basis for later assessment?"

The learning plan might include:

1. Relevant background information on student experiences and interests;
2. Learning goals and objectives for the experience;
3. Brief descriptions of the specific learning activities in which the student will be engaged;
4. Resources the student will use;
5. A description of the product or outcome; or
6. Method of assessment including provision for monitoring and target date for completion.

An example of a form that incorporates these elements is presented on the following page. This form is intended as a guideline not only for the types of information to include but also for the steps involved in the planning process. These steps are discussed in the next section. Additional examples of learning plans and contracts are included in Appendix B.

SAMPLE LEARNING PLAN


① GATHER STUDENT INFORMATION
② SPECIFY GOALS & OBJECTIVES
③ SELECT LEARNING ACTIVITIES
④ SELECT FORMS OF ASSESSMENT
⑤ LIST RESOURCES
⑥ DESCRIBE END PRODUCT
⑦ SPECIFY TIMELINE

Name	***Course***
Project Title	
STUDENT BACKGROUND AND INTERESTS:	
STUDENT GOALS AND OBJECTIVES FOR THIS PROJECT:	
PROJECT ACTIVITIES (INCLUDING ESTIMATED TIMELINE):	
ASSESSMENT ACTIVITIES: ***1. Monitoring Progress:*** ***2. Evaluation of Student's Work:***	
RESOURCES (INCLUDING NAMES AND ADDRESSES OF CONTACT PERSONS OR ORGANIZATIONS):	
PRODUCTS:	
COMPLETION DATE:	NEXT SESSION:

SAMPLE LEARNING PLAN

Name George Smith | ***Course*** Botany

Project Title Plants and Pollution

① GATHER STUDENT INFORMATION

STUDENT BACKGROUND AND INTERESTS:

George is interested in the effects of pollution on plant life in the community. He is also interested in learning laboratory and field study techniques. He has no previous Botany courses but is considering a career in the Life Sciences.

② SPECIFY GOALS & OBJECTIVES

STUDENT GOALS AND OBJECTIVES FOR THIS PROJECT:

1. Learn which plants are harmful to people and how they are harmful
2. Analyze the effects of pollution on plants in this area.
3. Learn about career opportunities in botany.

③ SELECT LEARNING ACTIVITIES

PROJECT ACTIVITIES (INCLUDING ESTIMATED TIMELINE):

1. Collect and label specimens of 10 local plants that are harmful to people.
2. Demonstrate the difference between healthy and unhealthy plant tissue.
3. Interview a plant pathologist and write a summary report.

④ SELECT FORMS OF ASSESSMENT

ASSESSMENT ACTIVITIES:

1. *Monitoring Progress:* Teacher and student will meet twice to discuss content and format of student's presentation.
2. *Evaluation of Student's Work:* Student's written and oral presentations will be evaluated by the teacher. Comments will be submitted by Mr. Tom Bell.

⑤ LIST RESOURCES

RESOURCES (INCLUDING NAMES AND ADDRESSES OF CONTACT PERSONS OR ORGANIZATIONS):

The Study of Plant Communities by H. J. Oshing
The Environmental Handbook by Garrett DeBell
Dr. Jim Gordon, 150 Central Ave., 926-4731 (Plant Pathologist)
Mr. Tom Bell, 1005 Water St., 874-1251 (Ecologist)

⑥ DESCRIBE END PRODUCT

PRODUCTS:

1. Display of specimens collected
2. Chart of pollutants
3. Demonstration of plant tissue analysis
4. Oral report on career exploration

⑦ SPECIFY TIMELINE

COMPLETION DATE: Dec. 14, 1979 NEXT SESSION: Sept. 28, 1979

Meet with George Sept. 28
Class presentation Week of Oct. 29
Meet with George Week of Nov. 12
Oral report Week of Dec. 10

HOW IS A PLAN PREPARED?

Planning experience-based learning activities includes a number of steps. These are listed below and are described further in the following pages.

1. Gathering information relevant to the learner's needs and interests;
2. Formulating goals and objectives for the learning experience;
3. Describing the experience-based activities;
4. Identifying resources to be used by the learner;
5. Describing the product to be developed; and
6. Selecting a form of assessment to measure student progress.

These steps are, of course, closely related to the content of a learning plan. Questions involving each of these planning functions will be discussed here in the above sequence. This order, although convenient for the purposes of discussion, may not in reality be the sequence of events for planning your particular experience-based activity or program.

For example, the learning activity may already be well-defined--an independent research project, a field placement, or a performance--so the planning focus is not on selecting the activity, but rather on shaping it to the individual student(s) and identifying resources. A particular event such as a local festival, election, or television series may be the impetus for planning experiential learning activities. In this case some of the resources are given, but the actual learning objectives and activities will need to be described. Regardless of the sequence of events in your own planning process, however, each of the above listed steps will at some point be a part of developing a comprehensive plan for a quality learning experience.

PLANNING WITH STUDENTS

1. GATHER STUDENT INFORMATION
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3. DESCRIBE LEARNING ACTIVITIES
4. IDENTIFY RESOURCES
5. DESCRIBE THE PRODUCT
6. SELECT FORM OF ASSESSMENT

GATHERING STUDENT INFORMATION: WHAT DO YOU NEED TO KNOW?

Below are some general types of information that are useful in determining objectives and learning activities.

- Student Interests. When learning activities are matched with high learner interest, stronger motivation is assured. For example, student interest in astrology could be used to build on math competencies. Similarly, a science fiction interest can be used to study branches of psychology, futurism, etc. The most difficult planning situation is one where there are no strong or identifiable interests.

- Proficiency Levels. Almost every kind of educational program (secondary or post-secondary) requires certain skill levels in reading, quantitative methods, oral communication, writing, etc., either as prerequisites for the program or as instructional goals. In an appropriate learning plan the objectives, the learning activities, and the expected outcomes are commensurate with the learner's ability to perform.

- Aptitudes. Observations of past performance or aptitude test results may indicate that a student has a potential for high performance in a previously unexplored area. No skill has been developed and perhaps no interest has been expressed, but nevertheless this untried area may correspond to the student's abilities.

- Requirements. Almost any agency or institution that confers an official certificate indicating completion or graduation has requirements. Such requirements may consist of certain courses that must be taken, a grade point average to be attained, certain competencies to be acquired, or the successful passing of comprehensive examinations. When these requirements exist, their recognition and analysis becomes a critical aspect of planning.

- Preferred Learning Styles. Some students "attack" a learning problem, making decisions rapidly and adeptly. Others will not know how or where to begin. Still others will study the problem carefully from all angles, considering alternatives and probable outcomes. Such differences depend on basic attitudes and mental habits, and are indicators of readiness for independence or need for structure. Being attentive to individual differences is essential to the planning process. Variations in preferred learning modes, e.g., experiential, symbolic, visual, or combinations of these, can also affect planning.

- Past Experiences. Information about past experiences, whether academic, vocational, or social, can often be used to shape a project, strengthen its design, enhance its appeal, and increase its appropriateness.

In addition to the above student data the availability of resources will affect the kinds of learning activities to be selected. For example, student interest in salt water marshes will present difficulties in locating appropriate learning sites if the student lives a thousand miles inland. Economic constraints must also be given due consideration.

Ideally, each of the above kinds of information would be used or considered in personalizing a learning program, contract, or project. There is no priority order implied by the above list of information types.

The next section discusses how to gather the information needed for planning with students.

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GATHERING STUDENT INFORMATION: HOW IS INFORMATION OBTAINED?

There are a number of sources of information to be used in planning, the most important of which is the learner. Whenever possible, the teacher should rely primarily on the learner's personal knowledge for the kinds of information sought and then supplement or validate with other sources. This means either interviewing individual students or facilitating a group discussion that focuses on student background and interests.

The chart below presents sources for obtaining different kinds of information and possible procedures that might be used to gather the information.

INFORMATION TYPE	SOURCES	PROCEDURES
Interest Areas	Students	Interviews Self-rating
	Files	Review of records for test scores
Proficiency Levels in Skill Areas	Students	Opinion items Self-ratings Objective tests (quantitative and qualitative) Interviews
	Other Staff	Interviews Written Reviews
	Files	Reviews of cumulative records, transcripts, etc.
Aptitudes and Abilities	Students	Opinion items Self-ratings Objective and subjective tests
	Other Staff	Interviews Written Reviews
	Files	Review of previous test
Requirements	Institutional Documents	Review of transcripts Review of graduation and/or entry requirements
	External Sources	Interviews
Preferred Learning Styles	Student	Interviews Observation of student during learning task
	Files	Review of inventories
Past Experiences	Student	Interviews
	Files	Review of transcripts

Using a variety of information the teacher and the student can develop a student profile. However, this will represent a temporary image only. Profiles are subject to change as new information becomes available, as the student becomes more accustomed to teacher/student relationships, and as the student encounters new learning experiences for which past achievement records are no longer accurate.

Developing a learning plan, regardless of its length or duration, is an evolutionary process which takes time. New information and experiences will affect its shape and direction. Because of the learner's involvement in the plan's preparation, the process presents a continuing opportunity not only for the teacher to learn about the student, but also for the student to question and assess the learning goals and objectives.

The teacher, as facilitator of the process with an individual student or with a group, will be required to ask appropriate questions, to help the student(s) examine their assumptions, to listen closely to responses, to avoid making generalizations, and, in general, to help the student(s) focus on an approach that will be both interesting and productive for the student(s). A set of possible questions for this interview process is included on the following pages.

PLANNING WITH STUDENTS: CREATING A STUDENT PROFILE

Interests • What prior learning activities did the student find interesting?	
• What are the student's out-of-school hobbies? If none are mentioned, how does the student spend his or her leisure time?	
• Why is the student interested in this course?	
• What career is the student interested in?	
Proficiency Level • What are the student's grades and test scores?	
• What does the student feel are his or her strengths or weaknesses in basic skills? What do the records indicate?	
• What is the student's current academic load?	
Aptitudes • What are the student's aptitude test scores?	
• Are these topics related to areas of demonstrated interest or achievement that could be explored?	
Requirements • How many of the student's current institutional course requirements have yet to be met?	
• Are there any additional requirements relating to the student's future plans to consider?	
• Does the student have any special requirements, e.g., physical handicaps or sociocultural background?	

PLANNING WITH STUDENTS: CREATING A STUDENT PROFILE

Learning Styles ● What is the student's preferred learning style?	
● What does the learning style inventory indicate?	
● What does the student feel about the experience-based learning approach? If not the preferred learning mode, is he/she interested in trying it?	
Past Experiences ● What related academic course work has the student taken?	
● What job experience does the student have?	
● What related social or personal experiences has the student had?	
Additional Information Needed:	
Teacher Summary--Comments:	

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GOALS AND OBJECTIVES: ARE THEY NECESSARY?

Educational theorists disagree considerably concerning the value of objectives when planning instructional activities. They generally agree, however, that objectives are useful in that they provide direction for selecting or designing learning activities, offer a vehicle for communication concerning expected outcomes of learning activities, and help the teacher and student develop assessment tools for measuring the effectiveness of the learning activities.

The controversy usually focuses on either the kind of objectives to be used or when objectives should be formulated. Many educators believe that most, if not all, learning needs to be specified ahead of time in precise, observable, measurable terms. Others disagree with this position on practical grounds, arguing that to state objectives for every kind of learning is simply not possible. Still others stand on philosophical grounds, disputing anyone's right to prespecify all that should be learned.

Educators with still another viewpoint insist that while objectives are worthwhile, they will, under ideal circumstances, evolve of themselves as a result of learning activities and interactions between student and teacher. This theory views goal formation as a highly dynamic process and has the advantage of preventing an overly rigid approach to conducting the learning process.

The approach recommended by these materials is an eclectic one. Given the wide range of learner needs, interests, and characteristics, institutional requirements, and subject matter differences, it seems reasonable to suppose that each of the statements or principles given above is valid under certain circumstances. Teachers, therefore, will need to be highly flexible in responding to circumstances.

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GOALS AND OBJECTIVES:
WHAT KINDS ARE USEFUL IN THE LEARNING PLAN?

The intended outcomes of a given instructional program will vary in terms of the level of specificity. The four levels in the goal refinement process discussed here are: goals, goal indicators, curricular objectives, and instructional objectives.

1. Goals -- Goals are stated in highly abstract terms; they represent valued competencies. They are directions and are usually concerned with lifelong outcomes.

   Example:

   Every learner should acquire an understanding of the structure of the governments--local, state, and federal--that affect his or her life.

   Goals are used as a basis from which to derive the next level of student outcomes--goal indicators.

2. Goal Indicators -- These are long-range forms of behavior that give observable evidence that progress toward a particular goal is being achieved.

   Example:

   Graduates will know which government agency to contact in regard to any given problem.

   Goal indicators are more specific than goals. They are a useful step between the goal and the next level of refinement--objectives.

3. Curricular Objectives -- An objective is a quantifiable and/or observable achievement accomplished under specific conditions. Objectives are derived from goals or from goal indicators and can be stated in relation to curriculum, course, or daily classroom assignments. It is helpful to consider objectives at two levels, curricular objectives and instructional objectives.

   Curricular objectives are competencies which result from student involvement in a specific curriculum or program of study. They consist of the skills directly related to particular disciplines or combinations of disciplines.

   Example:

   Learners will be able to prepare a written report that describes in detail the purposes, organizations, and operations of a selected public agency.

   The curricular objectives are more specific than goal indicators, and the desired outcomes are phrased in terms of measurable forms of behavior that students are expected to demonstrate within the learning context. Thus, achievement may be evaluated through the use of objective measures.

4. Instructional Objectives -- These include the competencies which the learner should be able to demonstrate as a consequence of instructional activities, the important conditions under which performance will occur, and the level of acceptable performance. They are short-term, may be measurable as a consequence of several days of instruction, and will probably represent achievement toward curricular objectives.

   Example:

   Following observation of a given local agency, the learner will be able to describe the operation of that agency in dealing with key local issues.

Thus, instructional objectives are usually fairly specific in terms of behavior, conditions, and standards, and can be tested within the context of the school.

Determining the goals and objectives for the learning experiences can be approached in various ways depending on the nature of the learning contract being formed. Discussion of the general goals for the course or project may be part of the information exchange between teacher and student at the onset of the planning process. However, these goal statements are not specific enough to form the basis of a plan or to determine a series of learning activities. For this, more detailed statements are needed, not only to provide a definite direction for the learner, but also to serve as a reference point for both teacher and student for the duration of the project or placement.

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GOALS AND OBJECTIVES:

WHAT CRITERIA CAN BE USED TO EVALUATE OBJECTIVES?

It is possible to examine any objective in terms of the extent to which it meets certain criteria. For our purposes, three such criteria are suggested: guidance, appropriateness, and feasibility.

1. Guidance -- Objectives must guide or provide direction to users and should be written at a level or specificity that is appropriate for intended use. However, it should be remembered that as specificity increases, the degree of flexibility for the learner may decrease. The following questions might be used to determine whether objectives provide adequate guidance:

   - Does the objective clearly indicate what the student should be able to do, e.g., recall, identify, solve, compare, interpret, and invent?
   - Will the objective help in the selection of learning activities and resources?

2. Appropriateness -- An appropriate objective has meaning and importance for the learner, is related to the educational goal from which it is derived, and is desirable in terms of the present and future expectations of the school or program. Ensuring appropriateness may require willingness to reassess changing needs and attitudes and to revise accordingly. The following questions might be used to determine appropriateness:

   - Does the objective relate to the goal from which it is derived?

- Does the objective specify a behavior that will be immediately useful to the learner after he or she has left school?
- Does the objective conflict with the existing purposes of the institution?

3. Feasibility -- A feasible objective is one that has a good probability of being achieved. Previous performance records, evidence of the student's achievement, and the teacher's own experiences should be considered.

If the objective has a good probability of being achieved, it is important to consider the practicality of working toward its accomplishment. Planners should appraise the potential benefits of the objective in light of materials and resources required. The following questions can be used to determine feasibility:

- Is the objective realistically consistent with learner and staff abilities?
- Has successful attainment of this or similar objectives occurred in other situations?
- Is the potential benefit of achieving the objective worth the foreseeable costs for personnel, materials, and resources?
- If the objective differs from present practices, is it desirable in light of foreseeable consequences of change and reorganization within the institution?

Two examples of critiquing objectives using these criteria are given on the following pages.

GOAL:

Students will be able to analyze, interpret, and evaluate experimental results, observations, reading sections, and other sources of information to arrive at generalizations and conclusions.

SAMPLE OBJECTIVE

Given recently drawn conclusions concerning ecological imbalance, students will be able to collect and analyze various ocean specimens in order to support or challenge the conclusions.

RECOMMENDATION:

☐ Keep as is

☒ Revise
- ☐ Insufficient guidance
- ☐ Irrelevant
- ☒ Infeasible

☐ Reject
- ☐ Insufficient guidance
- ☐ Irrelevant
- ☐ Infeasible

COMMENTS:

Since the school is not located near an ocean and the budget does not allow for extensive field trips, it would be excessively difficult to collect various ocean specimens.

GOAL:

Students will become skillful in locating reference materials, securing needed information, and evaluating the information for its accuracy and appropriateness.

SAMPLE OBJECTIVE

Students will achieve an understanding of the Dewey decimal system so they can locate reference materials in a library.

RECOMMENDATION:

☐ Keep as is

☐ Revise
  - ☐ Insufficient guidance
  - ☐ Irrelevant
  - ☐ Infeasible

☒ Reject
  - ☒ Insufficient guidance
  - ☒ Irrelevant
  - ☒ Infeasible

COMMENTS:

This objective fails to meet any of the three criteria.

Guidance: The intended behavior is not very clear. There may be several different opinions about what is meant by "an understanding."

Relevance: Will students need to understand the Dewey decimal system in order to become skillful in "locating reference materials in a library"? Would teachers, parents, educational specialists, subject matter experts, and the learners consider this a worthwhile objective? Probably not.

Feasibility: The benefit--should there be one--of teaching students the Dewey decimal system probably would not justify the costs for personnel, material, and resources, nor the time it would take to accomplish the task.

Once a teacher and a student have agreed on the objectives and have satisfied themselves that these objectives are specific, feasible, and appropriate, they should then examine the set of objectives as a whole in terms of two broader criteria:

1. Whether the set of objectives contains a balance of cognitive and affective learning,

2. Whether this set has adequate scope in terms of institutional requirements.

In examining their set of objectives with regard to cognitive and affective balance, the teacher and the student are encouraged to take the following steps:

- Analyze the entire set and identify the cognitive and affective levels present. The taxonomies of Benjamin S. Bloom and David R. Krathwohl are useful for this process.[1]
- Examine the goals and indicators. Do they include both the cognitive and affective domains?
- Consider the attitudes of students, staff, or other important groups concerning the topic. Are the objectives realistic in terms of your understanding of these attitudes?
- If the set of objectives seems inappropriate, make some revisions or additions.

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[1] Benjamin S. Bloom, ed., Taxonomy of Educational Objectives: Handbook I: Cognitive Domain (New York: David McKay, 1956); David R. Krathwohl, et al., Taxonomy of Educational Objectives: Handbook II: Affective Domain (New York: David McKay, 1964).

Having submitted a set of objectives to a cognitive and affective review, it is important to look at the set in terms of its scope, i.e., the adequacy by which the topic being addressed is covered by the objectives. Of course, adequacy of coverage is relative to the nature of the learning project and the type of institutional requirements that must be covered. In general, however, the following questions should be considered.[2]

- Is the overall goal represented by the set of objectives?
- Are the general needs and interests of the learner served by the objectives?
- Are the institutional requirements taken into account?
- Do any of your colleagues or subject matter experts have recommendations concerning comprehensiveness?

The above steps complete the process of formulating goals and objectives, opening the way to other phases in the preparation of a learning plan.

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[2] The FURTHER EXPLORATION section of this Book includes an activity on screening objectives in terms of their balance and scope.

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WHAT ARE SOME EXPERIENCE-BASED LEARNING ACTIVITIES?

How do student needs and objectives translate into learning activities? What kinds of community resources could be incorporated into the plan to extend the learning environment and to offer the student additional expertise?

One thing to keep in mind at this point is that the facilitator's role is to plan with the student, not for the student. The student should be encouraged to pursue activities that will be a challenge and will extend his or her talents and abilities. Experiential research projects, group activities, or field placements are all intended to open up new areas for skill mastery or possible career interest.

In planning experience-based learning activities with students, it is desirable to make the activities as personalized as possible to suggest or select activities that focus on a topic or area of interest for the student(s) and to incorporate a learning mode that may be new or challenging to them and at the same time will offer opportunities for success. According to David Kolb, "the effective learner relies on four learning modes--concrete experience, reflective observation, abstract conceptualization and active experimentation."[3] Ideally, the learning plan will offer the student a chance to explore each of these modes so that the student not only has concrete experiences but also is able to reflect on them, to integrate them with theory, and to use them to solve problems or make decisions.

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[3] David A. Kolb, Learning Style Inventory (Boston: McBer & Co., 1976), p. 3.

For example, an English class studying Shakespeare may have read the plays and may even attend a performance of one of them. These activities will increase the student's knowledge of Shakespeare plays, but they do not offer the student any concrete experience or opportunity for active experimentation with the dynamics of playwriting, playacting, or play production. Reading and observing are essentially reflective modes of learning. An experience-based activity will offer the student an opportunity to become actively engaged in some aspect of Shakespearean drama either as an individual or as a group. Without some form of concrete experience as a basis for reflection and integration, the student will not complete the experiential learning cycle.

These materials do not advocate the use of experience-based activities at the expense of or instead of the symbolic or reflective type of activity, but rather support the view that the appropriate blend of experiential and symbolic learning activities will enhance and make more meaningful the student's learning program. The following examples illustrate how a teacher can begin to create this blend of activities.

EXAMPLE ONE:

A student in your political science course is interested in the voting patterns in different city districts. This student's preferred learning style is a reflective, observational approach. While some of the learning objectives could be fulfilled by reading, analyzing data, or attending lectures on voting patterns in the city, additional activities could be designed for this student's learning program that challenge or extend this method of inquiry. Some of these activities might include:

- Make an oral report on the research data
- Design and/or participate in a mock election
- Report on a visit to government offices and interviews with officials
- Design a survey instrument and take a voter pool
- Observe a local election from city hall headquarters

- Arrange a field site visit or placement in the registrar's office
- Interview special interest groups or labor unions
- Write a profile of a voting district for the school newspaper

These tasks will require the student to use a variety of different skills--some analytical, some observational, some interactive--as they learn not only about the content of the questions, but also about the dynamics of the processes involved by interviewing participants and decision makers and by observing or simulating a "real" election situation. The actual learning plan would ideally include both symbolic and experiential activities which could help the student develop more than one skill, investigate more than one point of view, and practice using several kinds of resources.

EXAMPLE TWO:

Students in an English class have decided to publish a monthly newsletter as a way of improving their writing skills, as well as learning about careers associated with journalism. Each student will contribute an article or column to the newsletter that is in their area of interest, e.g., drama, sports, administration, events, etc. In addition to this assignment, they could enhance this learning opportunity by including some of the following activities which could be done individually or in small groups:

- Visit a local newspaper to get an overview of the process and roles involved;
- Arrange an "exploration" placement of 2-5 days at a newspaper to study one particular process or role and report on this experience to the class;
- Arrange to interview an editor, reporter, advertising manager, etc., and make a report to the class or invite a resource person to visit the class;
- Contact other schools or agencies producing newsletters, arrange a visit, gather samples, and report to class;
- Keep a journal on all activities related to this project; or
- Submit artwork or photographs for the newsletter.

The first step, then, in selecting the learning activities is to make a list of several potential activities, keeping in mind this goal of including both symbolic and experiential activities in the student's plan. The next step will be to select from this list the activities the student will engage in.

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HOW ARE LEARNING ACTIVITIES SELECTED?

Using the list of possible learning activities, the teacher and student can then select those that seem best suited for the learner. This selection process is based not only on course requirements, instructional objectives, and available resources, but also on the student's abilities, experience, and learning style. In terms of the political science example given above, one student may have already taken some courses in political science and/or had some research experience. This student will already have some background and skills in political analysis, but could benefit from conducting some interviews or might be interested in a field placement at the registrar's office.

However, another student with the same interest may have little or no social science background and will need some introductory or overview activities in addition to the observation or practice activities. Field-based experiences may include:

1. Placement with individuals in work settings who are willing to share their knowledge and skills with interested students;

2. Placement with agencies both public and private that are engaged in activities related to the student's interest; and

3. Placement in a cultural setting different from the student's own.

The primary justification for selection of a field-based experience is that the individual, agency, or cultural setting offers exposure to a "real" situation where activities are carried out that relate to the objectives in the student's learning plan. Additionally, however, the student's readiness for such a placement and the availability of the appropriate experiential site must be taken into account. These tasks of preparing students for field-based experiences and screening and selecting resource sites will be discussed later in this unit.

If the student and teacher agree that some field-based activity will be useful for the student, they can further define the nature of that involvement by describing its purposes and probable duration. It could be:

1. An orientation with the purpose of acquainting the learner with a subject area, a career, or a single issue, lasting from 1-3 days;
2. An exploration to provide sufficient exposure so that basic concepts and processes become familiar, lasting from a few days to 2 or 3 weeks; or
3. An investigation to provide sufficient experience for developing an extensive knowledge or skill base, lasting for a quarter or a semester.

Any of the experience-based activities will involve the use of community resources. The next section involves the selection and utilization of these outside sources to implement the learning plan.

When a combination of activities has been agreed upon, the teacher and student should review them, asking the following questions:

- Do the activities meet the objectives you and the student worked out?
- Are the activities suitable for the student's learning style; do they include both the preferred mode and another possibly new mode?
- Will the activities challenge the student in terms of broadening his or her skill base in one area or opening up a new area?

- Do the activities include a field-based component?
- Will the activities help the student fulfill the necessary course or program requirements?
- Do the activities offer variety in terms of learning environment and skills acquired?
- Do the activities relate to the overall course objectives as well as to the student's individual career or academic goals?
- Do the activities provide for both independent learning and group interaction?

PLANNING WITH STUDENTS

1. GATHER STUDENT INFORMATION
2. FORMULATE GOALS AND OBJECTIVES
3. DESCRIBE LEARNING ACTIVITIES
4. IDENTIFY RESOURCES
5. DESCRIBE THE PRODUCT
6. SELECT FORM OF ASSESSMENT

HOW ARE RESOURCE SITES SELECTED?

There will probably be several groups or individuals in the community who have access to information or hold jobs related to the student's proposed project. An experiential approach will place the student in direct contact with these resources whether it be a person, a facility, or materials and equipment. The teacher may or may not be responsible for screening and selecting the resource sites; a pool of potential sites may already exist. But the teacher will need to be familiar with each of the sites and the resource persons at the site in order to determine its appropriateness for the student's learning objectives.

Some examples of questions that can characterize the type of learning opportunity a site may be able to offer are:

- What can the student do at the site? Are there tasks the student can handle from the beginning? How will the student's role and responsibilities be defined? Are the tasks related to life skills?
- What can the student observe at the site? If the student cannot do what the resource person does, can he or she watch while it is done?
- What equipment can the student learn to use? Are there any legal constraints regulating the equipment a trainee may operate?
- Are there some academic prerequisites for the participant student? What basic skills competence will the student need? Is the resource person willing to teach the student such skills?
- Are there any nonacademic qualifications for the student to meet? Are there any special physical requirements, personal skills, or cultural backgrounds preferred?

- How much time can the resource person spend with the student? How often will the resource person want a student visiting the the work site? Are some times during the work day or week better than others?
- What kind of supervision will be offered? Will there be an opportunity for the student to ask questions and discuss observations? Will the supervision be consistent?
- What additional people will the student be interacting with? Will these be group tasks, shared responsibilities, staff meetings, etc.?
- Are the working conditions adequate? Is there appropriate working space? What is the neighboring area like? Is there good public transportation?
- Is there any descriptive material or literature related to the site that may be helpful to the student?

The teacher should also ask the contact person at the site about the nature of his or her job, career background, interests, and formal education. It is also important to know why the resource person is available to work with the student. Did they volunteer or was it the boss's idea? Are they looking for "cheap labor" from the student? Will they offer a real learning opportunity for the student or will it be routine tasks? Have they worked with students before? Will they be willing to evaluate the student's progress?

At the same time the teacher is obtaining information about the site, the resource person will have the opportunity to ask about the teacher's course or placement program and about the type of student he or she will be working with.[4]

Careful screening of and familiarization with resource sites allow the teacher to match the student with the appropriate site and will maximize the possibility of a field experience being successful.

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[4] An example of a teacher screening a resource site is given in Activity #4 of the FURTHER EXPLORATION section. Publications relating to the role of resource personnel are listed in the RESOURCE section.

PLANNING WITH STUDENTS

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HOW DO YOU ORIENT A STUDENT TO THE IDEA OF A FIELD PLACEMENT?

As the first step in orienting the student to the idea of a placement, the teacher should discuss both the practical and ethical considerations involved in using community placements as learning laboratories. The teacher should make sure that the student realizes something of the meaning of being an "outsider" in this learning environment. It may be necessary to stress the educational priority for the student, and to caution against assuming the role of critic or social reformer in the host situation. It is important to alert the student to the likelihood that experiences in situations with significantly different values and customs from one's own will have much to teach if time is taken to watch, listen, question, weigh, and discuss first reactions with other students and/or with the learning facilitator. Occasionally conflict arising from the "culture shock" of new experiences may be severe enough to stand in the student's way of learning from them. Every student should be assured in advance that the teacher will be sympathetic to "mismatches" and will be prepared to take action to correct them after appropriate consultations with the student and site supervisor.

The teacher can help the student recognize that most people come to new experiences with some misconceptions and built-in biases, and that there is value in learning from differences. It may not be automatically obvious to students that what they hope to achieve--new knowledge--can best be gained by giving up some old ways of thinking and feeling.

When introducing the student to a field situation, it is helpful to have the views of students who have already gone through such experiences. They can speak about them realistically in terms of both the problems and difficulties and the benefits and rewards of the experience. It is important to present some evidence that the experience leads to growth and self-satisfaction, and no one can translate this message better than a peer.

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HOW CAN THE TEACHER HELP STUDENTS CHOOSE APPROPRIATE SETTINGS FOR THEIR FIELD EXPERIENCE?

If students are to be involved in the site selection process, they may need some help with how to present themselves appropriately in interviews. Additionally, students should be accurately briefed on the rights and responsibilities they can expect at each placement.

The teacher can describe some general characteristics of sites, noting the differences between those with considerable structure, traditional service, and predictable work tasks and those with very little structure and a great deal of scope for individual initiative. The point is to help the student realize that choices among settings need to be made on the basis of individual learning style and needs. If the student makes the final decision on a placement, it is important to set limits on the number of sites to be visited and to establish a definite deadline for a decision.

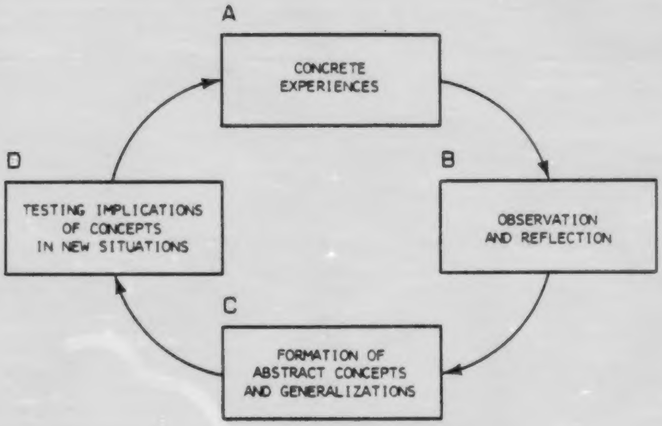
HOW DOES THE STUDENT PREPARE FOR A FIELD PLACEMENT?

Once the site has been selected the teacher should provide each student with a profile of the setting as he or she will experience it--the people to be met, the kinds of relationships to be expected, the purpose of the agency or organization, the student's role in it, the work that is expected, and the socio-cultural characteristics of the setting or its clientele, especially where they are different from the student's own background and experience.

The student should know to whom he or she should report, the role of the resource person in evaluating the student's work and learning, and any other arrangements which have already been made. If conferences are to take place at stated intervals, the student should know the schedule of these conferences in advance. All parties involved need to share the available information concerning the student's learning plan and the expectations and obligations of each party. Attempts should be made to provide accurate and thorough information as to what help the student can expect from the program and what the program will expect from the student.

Preparation should also include advance instruction in the use of keeping a journal, one of the most effective tools for experiential learning. By whatever name--workbook, field notes, progress reporting--some form of regular recording of daily events and their meaning to the student is a valuable learning tool. It is a way of learning to be an accurate observer, to reflect on things as they happen, and to articulate one's feelings about events. A journal also enables the student to share experiences with the learning facilitator and to receive feedback on his or her progress as it happens. Instructions for the field should include a page on journal writing, detailing what to look for, how to write entries, the function of the journal, and its usefulness in the learning process.

The experiential learning model described in Book I suggests a methodology for students to articulate their experiences in keeping a journal.[5] The four steps of the learning cycle could be seen as four parts in the journal keeping process.


A
CONCRETE EXPERIENCES
B
OBSERVATION AND REFLECTION
C
FORMATION OF ABSTRACT CONCEPTS AND GENERALIZATIONS
D
TESTING IMPLICATIONS OF CONCEPTS IN NEW SITUATIONS

A. Concrete Experience: The student has an experience and describes it in the journal from an objective point of view.

What happened and where? Who was involved? What was the outcome?

B. Observation and Reflection: The student identifies the significant learning within the experience.

What part of the experience interests you, or what do you have questions about? How does it relate to your learning objectives or other activities? What does the experience reveal about your own or other people's values or ideas?

C. Concepts and Generalizations: The student develops a conceptual framework that gives order to the learning and generalizes about it in relation to other theories or concepts.

Does this incident reflect a pattern? What general concept can you formulate as a result of your observations? How does this relate to your outside reading?

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[5] Michael Whitesage, "Articulating Experiential Learning: Helping Students Write About Their Experiences" (Paper presented to CAEL Western Sectional Meeting, Long Beach, CA, March 1, 1979).

D. Testing Implications: The student explains how the concepts were used to make decisions and solve problems or how what was learned may be used in another setting.

How does this experience compare with those you have had in the past? How could you apply what you learned in a new and different situation?

Using the points of the learning cycle as a road map is one way to guide the student's writing. The situation itself will most likely dictate the frequency of journal entries. Daily entries may or may not be too frequent; the placement may not offer enough variety for daily entries. However, some schedule for regular entries should be established.

The following dialogue between teacher and student illustrates some of the guidelines a teacher can offer a student keeping a journal.

In this session, Mr. Black is outlining the parameters of keeping a journal for one of his students, Lee.

LEE: Do I write only about things that happen at the placement site?

MR. BLACK: No, there will probably be nonwork activities that are quite relevant to your learning objectives, and you may find that a lot of activity at your workplace is not very relevant. It's not where you are, but what you are doing, and what you make of it.

LEE: So, I don't need to put down that I filed papers for three hours or ran errands all afternoon. But what about an argument with a supervisor or co-worker? Isn't that relevant to interpersonal communication?

Avoid Reporting facts without analysis

MR. BLACK: It certainly can be relevant, but you have to develop it so that it is. Don't just say "we got into an argument and it spoiled my day." Be more specific and analytical.

LEE: What do you mean by "specific and analytical?"

Include details of event and reflect on the incident

MR. BLACK: By "specific" I mean things like this: What was the basis for the argument? How did it come about? Who said what? By "Analytical" I mean that you should ask some "why" and "how" questions. Why did the argument happen? Why did you say what you did? How can you change your response next time?

LEE: Writing all that down will take a lot of time.

MR. BLACK: It might not take any more time if you would write more about just one incident and not try to make a chronicle of the whole day.

LEE: Do you mean I could just concentrate on that one thing?

MR. BLACK: Yes, and you might continue to explore one incident and its aftermath--if it continues to be a good learning opportunity.

LEE: That helps me. But there's another thing that bothers me. What about the days when nothing happens?

Learn from success as well as failure

MR. BLACK: There might be times when virtually nothing happens. But even then you might ask "why." If everything is going all right, you might learn something by asking what the supervisor or manager is doing to keep things going smoothly.

Learn from own activities and from observing others

You have two great potential learning laboratories out there. One is your personal interactions with others. The other is the interaction *other* people are having. Sometimes the best learning opportunity is something you observe rather than participate in yourself. You can "go to school" on your associates. Particularly since you want to learn leadership and supervisor skills, you can learn quite a bit by watching others. You'll see good and bad examples and you might find it very helpful to spend a little time as you write your log at the end of the day thinking about why some of the people you observe are succeeding while others are failing. Get in the habit of asking "why" and evaluating the interactions you observe.

LEE: I think this has been very helpful. I've got a pretty good idea how to begin.

No matter how complete and coherent orientation instructions have been throughout the session, many students will not have "heard" all of it because of human limitations to receiving and processing new information. Even though it may seem redundant to you, go over the highlights from previous sessions, recognizing that "you may have been told this before, but . . ." or "you'll probably remember that we covered some of this when we talked about placements, but . . .", etc. And be sure to leave room for questions as this will provide your cues for what has to be reiterated now. Remind the student that it will take time and practice to absorb all that has been covered, and that you will be available for reference and questions as time goes on. If the field experience is to be for several weeks, schedule follow-up conferences.

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HOW DOES THE LEARNER DEMONSTRATE HIS OR HER ACHIEVEMENT?

Each activity that is a part of the student's learning plan or contract should have a measurable outcome (i.e., a specific result or product that will demonstrate the learner's achievement in terms of the stated objective). This product or outcome can be in a written, visual, or oral form. It should, however, be directly related to the nature of the learning activity itself (i.e., the skills and methodologies being explored by the student during the course of the activity should be reflected in this product or presentation).

For example, if the student has studied dance or drama, a performance demonstrating these skills would be appropriate. Sometimes a combination of written, visual, and performance aspects of a project may be combined. In addition to performing, the student may also keep a journal or write an article for the school newspaper. It is important that the product requires some practice of basic skills such as reading, writing, or math, in addition to demonstrating newly acquired skills.

The determination of this product, which will provide the basis for the assessment of student proficiency, should be included in the student plan.

Some product or presentation ideas include:

- Oral presentations
- Media products: photographs, film, videotape
- Written reports, case studies, or journals
- Displays
- Performances
- Portfolios
- Published articles
- Interviews: audio tapes or transcripts

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HOW IS THE PRODUCT SELECTED?

In determining the product the student will submit for evaluation, the teacher should discuss with the student the advantages and disadvantages of several different options. The student may have a definite preference for one mode or another. The teacher can assist the student by asking:

- Does the product reflect the nature of the activity?
- Does it extend the student's abilities and enlarge on previous learning? Is it a challenge?
- Does it include practice in basic skills?
- Will the product satisfy institutional or course requirements?
- Is the product realistic in terms of schedule and materials available?
- Will this product serve the student in terms of his or her future plans?

A brief description of the product(s) required should be listed in the plan together with a target date for completion of the activity.

The final element of the plan is the selection of the assessment procedure--how will the student's demonstration of learning be evaluated and by whom?

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HOW IS EXPERIENCE-BASED LEARNING ASSESSED?

How will the student's progress in experience-based activities be assessed, especially when some activities take place outside the classroom? What is the basis for assessing a student's progress, and what is the methodology? Who does the evaluating?

These questions are discussed in Book IV: Evaluating Student Progress which offers some guidelines for selecting appropriate assessment measures and characterizes a number of specific measures to consider.

The actual evaluation of the student's product is an end-of-term activity, but the planning for this assessment should begin when the activity itself is selected. The assessment process itself is an ongoing one as the teacher monitors the student's activities during the course of the project. The choice of product to be developed or the form of assessment may change, but it is important that teacher and student agree on both the end product and the assessment process at this point so a definite direction for the experiential activity is established.

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HOW DO YOU KNOW A PLAN IS COMPLETE?

We have outlined here six steps for planning with students. They do not need to be completed in this order, but each should be addressed at some time during the planning process. As a guide toward ensuring that a comprehensive and useful plan has been developed, the Student Plan Checklist on the following page offers some questions to ask upon completing a plan with a student.

STUDENT PLAN CHECKLIST

	YES	NO
1. Does the student's plan allow for pursuit of individual interest?		
2. Has related reading material been identified?		
3. Has at least one tangible product been specified?		
4. Have interim deadlines as well as a deadline for project completion been identified?		
5. Is someone designated to evaluate each product?		
6. Does the student plan to attend all related project seminar meetings?		
7. Is the project related to the student's long-term plans?		
8. Do the goals, objectives, and activities focus on the development of knowledge of skills which will be useful in other contexts?		
9. Do they challenge the student to go beyond what he/she already knows or knows how to do?		
10. Does the importance of the goals, and objectives, and activities warrant the estimated time involved?		
11. Do project goals and objectives meet minimum course requirements?		
12. Are all the activities realistic, given the time and resources available?		
13. Has a field-based activity been included?		
14. Is each activity stated in terms of observable student performance?		
15. Is there a sufficient number of activities to determine whether the student has achieved his/her stated goals?		
16. Does each activity include a performance standard?		
17. If not, should a performance standard be included?		

SUMMARY

The purpose of planning experiential activities with students is not only to create a plan of action or a learning contract, but also to use the planning process itself as a learning experience for them.

This process includes the following steps:

1. Gathering Student Information: what do you need to know and how can you get that information?
2. Formulating Goals and Objectives: what will the specific knowledge and attitude outcomes of this experience be?
3. Describing the Learning Activities: what experience-based activities, or blend of symbolic and experiential activities, will help the student achieve his or her learning objectives?
4. Identifying Community-Based Resources: what is needed in terms of facilities and expertise to implement the learning plan?
5. Describing the Product: what will be developed by the student to document the learning experience and demonstrate the competence acquired?
6. Selecting a Form of Assessment: how will the student's progress be measured both during the activity and at the end of the activity?

①

A SELF-INQUIRY ABOUT PLANNING

a. What kind of planning have you done?

Recall an experience where you were involved in planning. What happened? Characterize the planning activity by answering the following questions:

What was being planned?

What role did you play?

Did everyone participate?

Were the goals clear at the end of the session?

Was the plan specific enough?

Did everyone know their responsibilities?

Was a date set for completion?

Evaluate the planning experience. Did it provide a useful plan? What could have been done to make it smoother or more productive?

b. What kind of instructional planning do you do?

Who participates in the planning?

Do you ever plan individually with students?

Do you ever plan in small groups?

Do you specify goals and objectives?

Who determines the completion date?

What kinds of products do your students produce?

c. Suppose you were asked by a colleague for suggestions of experience-based learning activities. What kinds of learning activities would you suggest for the following examples and what kinds of products do you think would be appropriate?

SUBJECT MATTER/TOPIC	LEARNING ACTIVITIES	PRODUCTS
Individual physiology project on nutrition		
Conversational Spanish		
The work ethic in American History		
Economics: Energy and the Consumer		

HOW DOES A TEACHER CREATE AN EXPERIENCE-BASED LEARNING PLAN?

②

a. Select a competence in your subject matter and write 3 instructional objectives for that competence.

EXAMPLE: An economics course requires competence in using economic terminology appropriately. Instructional objectives for acquiring that competence might be:

1) Be able to identify from a speech or article terminology specific to the field of economics.
2) Discuss the appropriateness of the terminology used in #1.
3) Be able to create or participate in a dialogue or economic discussion with classmates.

b. Critique your 3 objectives in terms of the following:

guidance

feasibility

appropriateness

cognitive/affective balance

c. Given these objectives, meet with at least two different students or colleagues to determine their preferred learning style. Keeping Kolb's LSI categories in mind, write a summary statement that reports the student's perceptions of how they learn best and what are their least preferred modes.

d. How can you accommodate different student interests and learning styles?

Take one of the objectives suggested in part a above and suggest at least 3 learning activities for each of the "students" interviewed. The activities should reflect more than one learning mode and should include at least one experience-based activity.

Which of the learning activities on this list would you personally be able to use in your class? Which would be difficult for you and why?

e. Using one of the experience-based learning activities listed in part d, list three community-based resources you could use and one or more product(s) the student might offer as evidence of learning.

ACTIVITY	RESOURCES	PRODUCT

HOW DOES A TEACHER DERIVE BASIC PLANNING INFORMATION FROM A STUDENT INTERVIEW? ③

ILLUSTRATION

This dialogue with a post-secondary student in a field-based program is an example of a productive interview. It is followed by a summary analysis and questions for your further consideration.

BACKGROUND: The student, Patricia Sullivan, works as a full-time bookkeeper in a twelve-person office, lives alone, and has few interests outside work. Her career objective is to become an accountant. The major problem is that her reading skills are minimal and her writing skills are very poor. The teacher, Nancy Brown, is faced with the problem of widening her sphere of interest and knowledge and at the same time improving her communication skills. Arrangements have already been made for Patricia to work on accounting through independent study and the occasional use of a tutor. In the session described below, Nancy hopes to explore the student's interest areas, work and leisure activities, and personal preferences. She will then plan assignments to help the student develop learning activities relevant to those areas.

Obtaining vocational background information

NANCY: Tell me about your work situation--how many people there are, how they function as an organization, and so forth. It's a travel business isn't it?

PATRICIA: Yes, it's one of the first ones in this area. There are twelve people in the office. There are three secretaries and the manager, and an administrative assistant, and five agents, and a person who runs errands--delivers tickets and such. And me. There's also some work done by outsiders--the accounting and the advertising. So they're around some of the time.

NANCY: I gather the manager is the overall boss. Does everybody report directly to him or her? Do you?

PATRICIA: It's a him. Well, not usually. Only if something goes wrong. Or if there's a big rush and they want us to work extra or something. My boss is the administrative assistant.

NANCY: Have most of the people worked there a long time, at least a couple of years?

PATRICIA: Most of the agents have, but not the others. And I've worked there seven years.

NANCY: I'm going to get to know much more about your place as we go along so I won't ask you more about the details, now. Just one more question--do you *like* working there?

Clarifying vocational goals

PATRICIA: Well, yes, I guess so. Sometimes I don't, but it's steady work. The jobs I had before were just temporary typing jobs and I didn't know how long they'd keep me or anything. This is much better.

NANCY: You told me you wanted to try to become an accountant, but you said the accounting was done outside...

PATRICIA: I'd like to better myself. I don't mind being a bookkeeper, but I don't think I want to do it another 20 years.

Learning about personal interests

NANCY: Let's talk about the rest of your life--when you're not working. What do you do for fun?

PATRICIA: I don't really have much time. When I get home it's after 6--about 6:30, and by the time I make supper and eat the evening's about gone. I usually watch TV and sometimes I read.

NANCY: How about on weekends?

PATRICIA: I work half a day on Saturday. Then I usually do a little shopping. Sometimes I go to a movie. And Sunday I go to Church and visit my Aunt who's not well. It's not a very exciting life, I guess. I wish I could do more. I sometimes see things in the paper that look interesting, but it always seems like too much trouble.

NANCY: Everybody has that problem to a certain extent--it's always easier not to do something. I notice that in myself all too often.

PATRICIA: Well, maybe I'll get braver about doing other things now that I'm doing this.

Drawing out student's self-concept

NANCY: Is bravery the issue, or time?

PATRICIA: I guess that I have time for some things, but I feel so hesitant about going by myself, and I feel too--inexperienced. How can I go to a lecture about astronomy when I don't know anything about it?

NANCY: But that's why you go. And if it turns out that it's too advanced a lecture, all you can lose is a little time, and you'll start learning which things are worthwhile.

PATRICIA: I guess you're right.

Drawing out student's personal interest

NANCY: Let's talk about what you should do before the next time we meet. You already have an arrangement on the accounting part, but we've agreed that the rest of your time should be spent in some "general studies." Here are my ideas about that--see if you agree. First, I want you to look at the papers and bulletin boards and pick out three things that you'd like to go to--whatever they are. I don't want you to consider time or money or location because this is all imaginary anyway. Then we will talk about your choices.

PATRICIA: Can it be shows or lectures or anything?

NANCY: Anything. Football games, dances, concerts, museums--anything.

PATRICIA: Ok. That sounds like fun.

Working on reading skills

NANCY: The second thing I want you to do is get a copy of this book: Studs Terkel's Working. Read some of it--however much you want. It's a book of transcriptions of tape-recorded conversations that Terkel had with all kinds of people. He talked to them about their work and how they felt about it.

PATRICIA: I read so slowly.

NANCY: I think you'll find this pretty easy reading. It's in separate three-to-four page pieces and you would only read it a little at a time.

PATRICIA: Ok. If it's stories about people, I'll probably like it.

Working on writing skills

NANCY: The third thing I want you to do is a little writing.

PATRICIA: I'm so bad at that--I don't know how to punctuate or anything.

NANCY: Punctuation is the easy part. We can worry about that later. Right now we just want you to get to the point where you feel easier about expressing yourself in writing.

PATRICIA: Ok. What do you want me to write?

NANCY: What I want you to write about over the next few times we meet is this: your job and the place you work in. I want you to tell me this time what you like most about your job and what you like least, and why.

PATRICIA: I could tell you that now.

NANCY: Then it shouldn't be hard for you to put it in writing.

PATRICIA: But I never know how to start.

NANCY: Well, what I was going to suggest is that you write it to me as a letter. Suppose I'm a friend and you're telling me about your work.

PATRICIA: Ok. How long does it have to be?

NANCY: Well, I could give you a definite length, but I would rather say that it has to be as long as you need to say what you want to say about work.

PATRICIA: All right.

NANCY: Do you know exactly what you're to do now before we meet again?

PATRICIA: Yes.

NANCY: Let's set a time for our meeting next week then.

SUMMARY ANALYSIS OF THE TEACHER'S ROLE

LEARNING FACILITATOR ROLE: This dialogue illustrates a situation in which the teacher accomplished a number of objectives:

1. She has begun an assessment of the student's competencies, her interests and her fears.
2. She has suggested learning activities which are a mix of ones in which she feels inadequate (reading and writing).
3. She has grounded the writing (and reading) exercises in the student's major experiential setting--her work-life.
4. She has recommended a reading that has the quality of familiarity--people talking about their work--and will also prompt the student to make observations about her own work. Transcripted oral statements are close in tone to the personal and conversational style of the "women's magazines" the student is used to.
5. She has suggested an exercise of choosing hypothetical leisure-time activities. This will aid in discovering further potential areas of interest to explore and will feed into the process of defining learning objectives. At the same time, it will begin to provide the student with a more systematic discovery of available cultural, recreational and educational resources, some of which may be utilized by the teacher in the learning process. Thus, the student has taken the first step in designing her own experiential learning activities.
6. She has set up a highly structured program of activities for the student (student has been told precisely what products are expected and when), but within the structure is considerable flexibility (e.g., no specific amount to read or write).

Consider the following:

- Why did the teacher ask personal questions?
- The teacher gave the student some advice. Was this appropriate?
- What other kinds of information would you have liked to have had?
- What other learning activities could have been used?

④

HOW DOES A TEACHER SELECT A RESOURCE SITE?

ROLE-PLAY

One person assumes the role of resource person who is being interviewed by a second person, a teacher seeking community agencies with expertise in a certain subject area.

The "teacher" should have in mind the type(s) of experience-based activities that will be used, i.e., orientation, exploration or investigation and include some of the questions listed on pp. 38 - 39 of the READING section.

The "teacher" may have a particular student in mind for this site or may simply be creating a "resource pool" for later use.

The following dialogue between a teacher, Richard, and a potential resource person, Barbara, may offer some guidelines for the role play.

ILLUSTRATION

In order to determine whether Barbara would be an appropriate resource person, Richard is conducting a site analysis of the types of learning activities that would be available in her department of Docu-Films.

Determining whether a particular department within a resource organization would provide appropriate learning activities

RICHARD: I was glad to hear that you might be interested in having one of our students work with you. Docu-Films has provided field placements for us in the past. The Executive Director seemed to think that your department might offer some different kinds of opportunities from those we've had before.

BARBARA: Yes, I think our department would be a good place for a student, especially since we're about to get into a whole new phase. In the past most of our distribution has been to schools and universities, but now we're also trying to get our films out to grass-roots organizations, and we can really use some help with that.

Asking for specific information regarding departmental activities	RICHARD: Can you be more specific about the kinds of organizations and what your approach is going to be? BARBARA: Well, identifying the organizations would be part of the job, but we already have a few in mind. Basically, we want to do two things: to get the films out to these community groups and to give them some idea of educational programs they could develop around the films. Eventually, we even hope to develop training materials that can be distributed with the films.
Determing student role on the job	RICHARD: Sounds good. Exactly what part of this process would the student be involved in? BARBARA: Well, that could range anywhere from contacting the administrators of the community organizations, to classifying the films in terms of how they'd be used, to helping us develop the training procedures. It would depend a lot on what the student's particular interests are.
Determining degree of responsibility student will be given	RICHARD: How much responsibility could you afford to give a student? BARBARA: Quite a bit. This is a wide-open field, so I'm looking for someone to help me define it. If the student turns out to be capable, they could essentially handle a lot of the work on their own.
Determining monitoring/evaluation procedures	RICHARD: Great--although we'd like to be sure there's some provision for regular monitoring and evaluation. How will you handle that? BARBARA: Well, for one thing, the student would be working in a team with two other people in both the planning and the action phases. Also, we have regular staff meetings and staff evaluation procedures.

RICHARD: That sounds fine as a way to structure the monitoring process. In addition, do you think you'd have some time to meet with the student individually?

BARBARA: Certainly, I'd be glad to--especially since I'll want to be kept informed about this new project. Oh, by the way, about how much time will the student be spending on the job?

Establishing program requirements

RICHARD: Well, the exact number of hours will depend on what you two decide, but the college requires a minimum of ten hours a week for this sort of field placement.

(Richard and Barbara continue to talk for another twenty minutes, until he feels that site analysis is complete)

PRACTICE

What kinds of resources could you use?

a. Identify several types of resources that would be useful for your course or department.

b. List some possible people or agencies that could supply the above resources.

c. Make an appointment to visit or interview one or more of these resources.

d. Are there any in-house resources you could be using? Any sharing of resources with another teacher?

e. Find out if there are any institutional regulations regarding student placement or use of community resources.

HOW DOES A TEACHER PREPARE A STUDENT FOR A FIELD PLACEMENT INTERVIEW? ⑤

ILLUSTRATION

This dialogue with a post-secondary student in a field-based program is an example of a productive exchange. It is followed by a summary analysis and questions for your further consideration.

BACKGROUND: Judy is in her third year of study toward a B.A. degree. She lived in South America for two years. While in South America she learned Spanish and became interested in Latin American politics. She has done some photography on her own and is now hoping to begin a career in documentary film. Her teacher, Richard, has suggested that she should prepare for this career by seeking a field placement in a film-related area. With this in mind, Richard has made contact with Barbara, the Director of Programming and Publicity for Docu-Films. This non-profit organization, which has branch offices on both coasts and specializes in distributing political documentaries, has provided site placements for the college in the past.

Having explained the Docu-Films set-up to Judy, Richard gives her some advice on the kinds of information she should seek in her preliminary interview before deciding on her field placement.

Describing the setting	JUDY: The work that I'd be doing sounds pretty interesting and Docu-Films would certainly be a good employer to have on my resume. What's this woman Barbara like?

Describing the site supervisor

RICHARD: I had a pleasant interview with her--she seemed direct and efficient, and she seemed willing to give you a lot of freedom. I told her you were an independent worker, and she seemed pleased with that. In terms of her professional capabilities, the director of the organization told me that she's a very good administrator and has been creative in getting new funding for the organization. Maybe you can get involved with her administrative work as well--that's certainly something you could discuss with her if you're interested. As far as personality goes, I think you'll have to make that decision when you meet her. One of the ways you can find out what she's like is to ask her about her background--what kind of educational and career training she has had, how she got into this field, and so forth.

JUDY: Why do you think she is interested in having a student work with her?

Describing role of student at the site

RICHARD: Well, apart from the fact that we've worked with Docu-Films in the past, I think she's anxious to get this whole community contacts project going, but she doesn't have enough people to handle it right now. You'd be working in an area that's not even defined yet. Does that worry you?

JUDY: Well, it's a bit frightening, but it's so close to the kind of work I'd ultimately like to do that I'd hate to turn it down.

Reminding the student of his availability

RICHARD: I think that the question of structure is crucial to this site placement. Obviously its advantages have to do with the amount of independence and the room for creativity you'd be given, and I think you can handle that--I wouldn't have suggested this site placement if I didn't think so. But if you find the thing is getting out of hand, you'll have to ask for more structure. Remember that I'll be glad to participate in any meeting you have with Barbara, if you need help raising the question of supervision.

JUDY: Do you know how much time I'll spend actually working with Barbara herself?

Advising student to clarify the exact nature of the supervision and her responsibility

RICHARD: That will depend a lot on how you and Barbara end up defining your role and how much time you spend at the office. I left the exact determination of how many hours you'll work up to you, although I told her you'd be putting in at least ten a week. This meeting you'll have with her is a chance for you to work out the details of your position there as well as to gather impressions about Barbara and her department. And don't hesitate to ask questions--you've asked good questions in this session with me, and the success of your placement depends on your being able to do that with Barbara. Do you feel you're ready to visit Docu-Films now?

JUDY: Yes, I think I know what questions to ask.

RICHARD: Good. As soon as you make an appointment with Barbara, let me know and we'll set a time to meet again.

Summary Analysis of the Teacher's Role

LEARNING FACILITATOR ROLE: This dialogue illustrates a situation in which the teacher has accomplished a number of objectives:

1. He has described both the setting and the supervisor to the student.
2. He has suggested some specific questions for the student to ask in the interview in order to clarify her role and responsibility, as well as the nature of the supervision.
3. He has presented the placement as an opportunity for independent work and creative input. Without urging the student to accept the placement, he expresses his confidence in her ability to handle it.

Consider the following:

- What additional questions could the teacher have suggested that the student ask at the interview?
- Under what conditions would you permit a student to screen his or her own site as a resource?

WHAT ARE SOME TECHNIQUES FOR SCREENING LEARNING OBJECTIVES?

⑥

The purpose of this activity is to acquaint you more thoroughly with the techniques of screening sets of objectives. To do this, a variation of a programmed text format is included as Appendix A at the end of Book II. In this programmed text, concepts are explained and then questions and exercises are provided to give you practice in using the concepts.

Proceed through the text at your own pace. Repeat exercises if you wish or refer back to any section whenever you wish.

The activity is presented in three parts:

Part One:	Appropriate Representation of Cognitive Behaviors
Part Two:	Adequate Representation of Affective Behaviors
Part Three:	Adequate Subject Matter Coverage

⑦

HOW CAN A JOURNAL BE USED IN AN EXPERIENCE-BASED ACTIVITY?

a. Develop a set of guidelines for use with your students about journal keeping. Your guidelines should address the following:

- What to write about;
- How to write entries;
- The function of the journal;
- Its usefulness in the learning process;
- Common errors; and
- Examples of effective entries.

b. Keep a journal for a week, making daily entries following your own guidelines. Discuss one of these entries with a colleague. Was it a useful activity? What did you learn?

USING EXPERIENCE-BASED ACTIVITIES

a. What kinds of experience-based activities could you use in your own course or program?

In addition to your own ideas for possible experiential activities, ask your students for their feelings and ideas about this approach and about possible resources.

b. Could you promote an interdisciplinary approach to your subject by planning for the cooperative use of community resources?

Take a local event or educational media program and explore possibilities of working with a colleague or another department to develop an experience-based learning plan. For example, take a bicentennial event, a museum exhibit, a television series such as The Ascent of Man, America, or The Human Machine.

c. At the present time how do you feel about making experience-based activities a part of your course plan?

How do you feel about involving students in the planning process?

How do you feel about using community resources?

What planning procedures do you intend to use in your next semester?

⑨

SELF-ASSESSMENT

What is your assessment of your present ability to plan with students, that is, to:

- Interview students: assess interests, needs and learning style;
- Specify goals and objectives;
- Identify experience-based learning activities appropriate to the objectives and student characteristics;
- Find learning resources;
- Describe products appropriate to experience-based activities; and
- Determine ways to evaluate experience-based learning.

MEDIA

In Addition to the Classroom, 1979, Far West Laboratory, 1855 Folsom Street, San Francisco, CA 94103.

Two 18-minute color videotapes sharing the role of teachers in different secondary and post-secondary programs using experience-based techniques. With respect to planning, the following situations are described: (1) individual student planning for a secondary, career-related project; (2) individual student planning for a post-secondary field internship; (3) group planning for a class project.

Educational Objectives; Selecting Appropriate Educational Objectives; Identifying Affective Objectives, filmstrip-tape programs created by W. James Popham and Eva L. Baker for Vimset Associates, Inc., P.O. Box 24714, Los Angeles, CA 90024.

SELECTED ANNOTATED BIBLIOGRAPHY

This bibliography represents a variety of materials: some scholarly, others "popular;" some theoretical, others practical; and some lengthy, while others are brief. It is hoped that the annotations are sufficiently detailed to show how the reader might profitably sample its offerings.

Appalachia Educational Laboratory. Organizing Community Resources for Experiential Learning. Appalachia Educational Laboratory, Charleston, West Virginia, 1980.

> These are training materials prepared to assist educators in identifying and analyzing resources in the community for potential learning opportunities.

Argyris, Chris and Schon, Donald A. Theory in Practice: Increasing Professional Effectiveness. San Francisco: Jossey-Bass, 1978. xvi, 224pp.

> Though not directed only to the educator, Theory in Practice will help educators become more self-aware, more aware of others, and hence more effective.
>
> The authors distinguish espoused theories, which are used to justify and describe behavior from theories-in-use, which are the operant theories of action. They examine how espoused theories and theories-in-use influence both personal and professional effectiveness and discuss strategies and environments for learning how to change.
>
> A good companion reading with this book is Chickering's "Developmental Change as a Major Outcome" in Keeton, et al., Experiential Learning, annotated below. Chickering, among other things, points out the implication of Argyris and Schon for assessment.

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*Some of the items in the bibliography were taken from Experiential Learning: An Annotated Literature Guide, 1978 supplement. Council for the Advancement of Experiential Learning (CAEL). American City Building, Suite 212, Columbia, MD. Those items are identified with the acronym (CAEL).

Baines, Tyrone R. "The Faculty Supervisor" in Duley, John, ed. Implementing Field Experience Education. San Francisco: Jossey-Bass, 1974. Pp. 39-44.

> To understand the faculty supervisor's role, Baines first examines three models for field experiences. He concludes that though structures and forms may vary, all three have one purpose, to promote learning. As the university's representative, the faculty supervisor must ensure that the field experience does promote learning and that the student has access to it.
>
> The faculty supervisor and the program administrator, Baines contends, have different functions requiring different skills and should be, therefore, different people. However, one person frequently does both jobs, and Baines goes on to discuss six functions such a person will perform.

Baker, Eva L. and Popham, W. James. Expanding Dimensions of Instructional Objectives. Englewood Cliffs, NJ: Prentice-Hall, 1973. x, 130pp.

> A collection of five self-instructional programs concerning instructional objectives. The first attempts to demonstrate that instructional technology can have a positive impact in the classroom. The second examines a strategy for systematically securing the preferences of various representative groups in order to establish educational goals. The third provides a strategy for designing affective objectives. The fourth, based on the premise that objectives should specify content which is generalizable beyond a single test item, teaches how to identify and write such objectives. The last program provides practice in writing tests which measure objectives.

Bowler, Rosemarie, et al. Fieldwork Supervisor's Manual. San Francisco State University, 1979, 16pp.

> A guide for fieldwork supervisors developed from discussions between supervisors and instructors involved in post-secondary field placement programs. The manual contains procedures and forms.

Breen, Paul, et al. Learning and Assessing Interpersonal Competence--A CAEL Student Guide. CAEL, American City Bldg., Suite 403, Columbia, MD 21044, 1977.

CAEL report #2 is a companion volume to #1, by the same authors, Teaching and Assessing Interpersonal Competence--A CAEL Handbook. It is based on the same theoretical framework and contains some identical sections. Its special contributions are chapters on planning for experiential learning and preparing for assessment. They offer detailed suggestions for developing a life goals autobiography, articulating personal goals to interpersonal development, and selecting an experiential learning site, as well as surveying 11 kinds of assessment.

Burt, R.F., and Douglas, M. The Community Resource Person's Guide for Experience-Based Learning. Portland, OR: Northwest Regional Educational Laboratory, 1977. (Available from Northwest Regional Educational Laboratory, 710 Southwest Second Avenue, Portland, Oregon 97204).

A booklet designed to aid people in the community in helping students to learn through off-campus experiences. Offers guidelines for planning time with students, communication, evaluation, etc.

Clark, F.T., and Chisholm, S., eds. Contract Learning Casebook. Saratoga Springs, NY: Empire State College, Center for Individualized Education, 1975.

A guide for mentors who are designing learning contracts with students. Samples of actual learning contracts are included which emphasize the development of the internal contract areas such as the student's general purpose, specific purpose of the contract, learning activities, and methods of evaluation. (CAEL)

DeCecco, John P. The Psychology of Learning and Instruction: Educational Psychology. Englewood Cliffs, NJ: Prentice-Hall, 1968. xvi, 800pp.

> DeCecco has prepared a college textbook for prospective teachers which is intended, among other things, to provide fairly specific guidelines for analyzing student entering behavior, stating instructional objectives, providing the necessary conditions for various types of learning, and constructing tests and interpreting test scores. Thus, this text pertains to our units on planning, monitoring, and assessing.
>
> It is organized into sections on instructional models and objectives, entering behavior, instructional procedures, educational innovations, and performance assessment and research. A bibliography and an index complete the book.

Heermann, B.C. Experiential Learning in the Community College (Topical Paper No. 63). Los Angeles: ERIC Clearinghouse for Junior Colleges, University of California, 1977. (ERIC Document Reproduction Service #ED140909). EDRS price MF-$0.83 HC-$4.67 plus postage.)

> This monograph argues the need for incorporating experiential learning of many types into two-year college education. Several examples are used to illustrate the essential components of sponsored experiential programs, and a detailed discussion on recognition, assessment, and crediting nonsponsored experiential learning is given. Specific requirements for a successful sponsored learning program include, but are not limited to, careful planning, systems design, energy, enthusiasm, and the knowledge, skills, attitudes, and support of faculty, counselors, administrators, and other participants. The College Without Walls at Sinclair Community College (Ohio) is described to illustrate the operation of a comprehensive experiential learning program. Experiential learning assessment forms are appended and a bibliography is included.

Keeton, Morris T., et al. Experiential Learning: Rationale, Characteristics, and Assessment. San Francisco: Jossey-Bass, 1977. xxx, 266pp.

A distillation of theoretical papers commissioned by the CAEL Steering Committee to illuminate the practical work of CAEL. Independent interpretations rather than a prescriptive credo, they are aimed at a broad audience of students, faculty, administrators and educational policymakers.

Part One concerns the history, present conditions and future of post-secondary learning options and credentials, especially the role of experiential learning. Part Two analyzes experiential learning, and Part Three addresses both the state of the art in assessment of experiential learning and possible avenues of improvement. Four priority topics are reflected in the papers: within learning objectives, interpersonal skills and personal development; within learning arenas, the sites and setting of work experience; within instrumentation and methodology, the portfolio as a tool of assessment; within assessors, the use of expert judgment in assessment.

Two appendices concern current CAEL publications and CAEL committees, and a bibliography and index conclude the book. The CAEL publications are presented in a useful bibliographic essay format.

Kolb, David A. and Fry, Ronald. "Towards an Applied Theory of Experiential Learning" in Cooper, Gary L., ed. Theories of Group Process. London: John Wiley & Sons, 1975. Pp.33-57.

Kolb and Fry outline the experiential learning process, then devote most of their attention to discussing four implications of that process: (1) the integration of cognitive and socio-emotional perspectives on learning; (2) the role of individual differences in learning style; (3) the concept of growth and development inherent in the process; and (4) a model of learning environments commensurate with the process. They present evidence that individual learning styles influence both the individual's preference for certain educational formats and educational content.

This essay facilitates an understanding of the rationale for experiential learning, as well as an understanding of why some students will prefer and do better in it than others.

Kronick, R.F. "Academe: Internship: The Delicate Balance." Journal of Sociology and Social Welfare, 1974, 1, 130-134.

> Describes the ongoing debate between "traditional" scholars and those committed to experiential learning over the legitimacy of off-campus experiences as learning and how to evaluate these experiences as academic enterprises. Traditionalists hold fast to the tenets of on-campus learning stating that the off-campus projects are too often visceral in nature, guided by emotion rather than intellect. One academic department is described and the manner in which on-campus and off-campus learning experiences are interfaced is illustrated. (CAEL)

Lupton, D.K. "The Project-Syllabus Method in Experiential Education." Alternative Higher Education, 1976, 1(1), 43-50.

> The project-syllabus is an outgrowth of the individual contract system used in experiential education. It is a contract containing experiential objectives, field resources to be tapped, a listing of topical inquiries, grading procedures, and a format for preparing reports. (CAEL)

Mager, Robert F. Preparing Instructional Objectives. Belmont, CA: Fearon, 1962. xii, 60+ pp.

> Previously published as Preparing Objectives for Programmed Instruction, this book is itself a self-instructional program. It focuses on one skill--how to communicate or specify objectives--and discusses en route the advantages of carefully specifying objectives, as well as the characteristics of usefully stated objectives. It also provides practice in recognizing well-stated goals and in selecting test items.

McClelland, David C., et al. The Achievement Motive. New York: Irvington Publishers, 1976. xxxii, 386pp.

This is a reissued edition, with a new preface, of a book originally published in 1953. It proposes a theory of motivation, offers a practicable method of measuring achievement, and discusses the possible origins of the achievement motive.

Lists of figures and tables, appendices, references and indices supplement the scholarly text. The new preface traces the theory and research which have grown out of this work.

McClure, Larry, et al. Experience-Based Learning: How to Make the Community Your Classroom. Portland: Northwest Regional Educational Laboratory, 1977. xiv, 246pp.

The authors present tested procedures in an orderly and clear fashion. Chapter 1 defines experience-based learning and, as the authors themselves say, may be useful in helping persuade others of its value. Chapter 2 suggests techniques that can be used separately or together to structure student learning. Chapter 3 offers ways to analyze community resources for their learning potential, and Chapter 5 tells how to actually develop and use these resources. Chapter 4 describes a procedure for planning with students, and Chapter 6 gives suggestions for administering the process.

The appendices describe 25 student projects that worked, present both an annotated and an unannotated bibliography, and sketch supplementary materials available from the Laboratory. This guide is indexed.

McKean, B., ed. Toward Defining Measurable Objectives in the Affective Domain for Experiential Education Programs. Denver: Colorado Outward Bound School, 1975. (Available for $1 from Colorado Outward Bound School, 945 Pennsylvania Street, Denver, Colorado 80203. ERIC Document Reproduction Service #ED139572. EDRS price MF-$0.83 plus postage, HC not available from EDRS.) (CAEL)

Nesbitt, Hadley. College-Sponsored Experiential Learning--A CAEL Student Guide. CAEL, American City Bldg., Suite 403, Columbia, MD 21044, 1977. iv, 82pp.

CAEL report #6 is the companion volume to Duley and Gordon, CAEL #5, and it is designed to help students make the most of experiential learning. Eleven basic steps form the organizational core of the book: taking stock of educational goals, considering the placement options available, defining principle tasks and duties, describing specific learning objectives, identifying basic preparation, devising a learning plan, or your learning outcomes, and establishing new learning objectives.

Charts, check lists and work sheets aid the student at each step. Reference is made to three recent and important books on life-planning.

Northwest Regional Educational Laboratory. Student Guide to Writing a Journal; Student Record of Community Exploration; and Student Competencies Guide: Survival Skills for a Changing World. Portland, OR: Author, 1977. (Available from Northwest Regional Educational Laboratory, 710 Southwest Second Avenue, Portland, Oregon 97204.)

Three guides prepared for students participating in Experience-Based Career Education, a program developed by the National Regional Educational Laboratory. Practical three-hole punched workbook format. Although designed for high school students, could also be useful at the post-secondary level. (CAEL)

Popham, W. James and Balker, Eva L. Establishing Instructional Goals. Englewood, Cliffs, NJ: Prentice-Hall, 1970. x, 130pp.

A collection of five self-instruction programs concerning instructional goals for prospective and practicing teachers, elementary through college levels. The first program provides an overview, the second assists in developing precisely stated instructional goals, the third provides tools for selecting appropriate educational objectives, the fourth describes ways of establishing performance standards, and the last examines a curricular rationale.

Each of these topics is also dealt with in a conventional text, Systematic Instruction, by the same authors. In addition, the authors have prepared other related self-instruction programs; see, for example, Baker and Popham, Expanding Dimensions of Instructional Objectives,in this list.

Popham, W. James, et al. Instructional Objectives. Chicago: Rand McNally, 1969. x, 142pp. (American Educational Research Association Monograph Series on Curriculum Evaluation, #3.)

> Elliott Eisner presents a paper on "Instructional and Expressive Educational Objectives: Their Formulation and Use in Curriculum." W.J. Popham contributes "Objectives and Instruction;" Howard Sullivan adds "Objectives, Evaluation, and Improved Learner Achievement." Louise Tyler concludes with "A Case History: Formulation of Objectives from a Psychoanalytic Framework." Each paper is followed by a discussion, and each author delivers a final epilogue. A short list of references is provided.
>
> This is a theoretical forum representing the "state of the art" prior to the 1970's.

Society for Field Experience Education. Founding Conference: Society for Field Experience Education. Papers presented at the Founding Conference for the Society for Field Experience Education, Hofstra University, Hempstead, NY, November 1972. (ERIC Document Reproduction Service #ED089561. EDRS price MF-$0.76 HC-$1.95 plus postage.)

> This document presents the founding conference report for the Society for Field Experience Education (SFEE). The report covers the proposal to establish the SFEE and presents papers and workshop reports which cover the concept of experiential learning, preparation for field experience, field objectives and their evaluation, concerns and approaches to the issue of field study follow-up, and a report on plans for a Chicago consortium. (CAEL)

Tyler, Ralph W. Basic Principles of Curriculum and Instruction. Chicago: University of Chicago Press, 1949. vi, 128pp.

> This book is not a textbook, or a manual for curriculum construction, but rather an outline of one way of viewing an instructional program as a functioning instrument of education. The reader is encouraged to examine other ways of viewing and to develop his or her own conception.
>
> Basic Principles is organized around four fundamental questions: What educational purposes should the school seek to attain? What educational experiences can be provided that are likely to attain these purposes? How can these educational experiences be effectively organized? How can we determine whether these purposes are being attained? A fifth section of the book discusses how a school or college staff may work on curriculum building.

Tyler, Leona E. Individuality: Human Possibilities and Personal Choice in the Psychological Development of Men and Women. San Francisco: Jossey-Bass, 1978. xviii, 274pp.

> Tyler has long been interested in and has long written that branch of psychology which is concerned with individual differences. Some time ago, she broke with the traditional approach to this subject and proposed instead that an individual is the result of a continous developmental process in which a unique fraction of the innumerable possibilities inherent in the human race is selected and organized. In this book, she seeks to build a philosophical and theoretical framework on the foundation of the above proposition and to fill the framework in with relevant research. Such filling, she warns, still has many gaps.
>
> Though addressed to other psychologists, this book is quite readable, and the author hopes that it will stimulate the development of new assessment techniques and find application in counseling and placement.

APPENDIX A

SCREENING LEARNING OBJECTIVES

PURPOSE: The purpose of this activity is to acquaint you more thoroughly with the techniques of screening sets of objectives.

THE ACTIVITY: We are primarily concerned that you develop a general familiarity with the process of analyzing sets of curricular objectives. To do this, a variation of a programmed text format has been used. Concepts are explained and then questions and exercises are provided to give you practice in using the concepts.

Proceed through the text at your own pace. Repeat exercises if you wish or refer back to any section whenever you wish.

The activity is presented in three parts:

Part One:	Appropriate Presentation of Cognitive Behaviors
Part Two:	Adequate Representation of Affective Behaviors
Part Three:	Adequate Subject Matter Coverage

PART ONE: APPROPRIATE REPRESENTATION OF COGNITIVE BEHAVIORS

One of the first things to consider in analyzing a set of objectives is whether it contains an Appropriate Representation and Emphasis of Cognitive Behaviors. To do this, you need to decide what kinds of cognitive behaviors exist in the set.

A. Determining Types of Cognitive Objectives

COGNITIVE refers to intellectual skills and abilities as opposed to motor skills and attitudinal behaviors.

Many people find it convenient to classify their cognitive objectives according to one of the cognitive taxonomies. Bloom's taxonomy*, for example, classifies behaviors in the following major categories:

KNOWLEDGE
COMPREHENSION
APPLICATION
ANALYSIS
SYNTHESIS
EVALUATION

If you know what these terms mean and have used this taxonomy before, turn to Part Two, page 29 . Otherwise continue on next page.

Each category is called a level on the taxonomy. KNOWLEDGE is the lowest level; EVALUATION is the highest level.

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*Benjamin S. Bloom, ed. Taxonomy of Educational Objectives; Handbook I: Cognitive Domain. New York: David McKay, 1956. There are other taxonomies, but this one seems to be the one used most often.

This is a simplified version of Bloom's taxonomy. You are encouraged to refer to it when completing pages 5 to 28.

KNOWLEDGE:	Students recall, recognize, or remember specific items, information, objectives, terminology, attributes, and so forth.
COMPREHENSION:	Students demonstrate understanding of concepts by perceiving and/or identifying the meaning of material presented to them, can see relationships, describe in their own words, draw conclusions.
APPLICATION:	Students select and use one or more learned principles to produce or alter something; select and use formulas to solve problems; select and use appropriate rules or procedures to work on material.
ANALYSIS:	Students distinguish constituent parts of ideas, materials, or a communication (e.g., distinguish fact from hypothesis, identify unstated assumptions); determine relationships of the parts; recognize the form, structure, or organizational principles of the ideas, materials, or communication.
SYNTHESIS:	Students produce a unique plan, communication, or set of abstract relationships; produce, use, or alter something in a form or manner that in some way goes beyond any existing structures or principles of which they are aware.
EVALUATION:	Students judge the value of ideas, solutions, materials, methods, etc., using their own or given criteria and standards; appraise the extent to which things are accurate, effective, satisfying, efficient, practical, etc.

Examples of two objectives per category are provided in the following pages. Since the same two objectives are used for all six levels, some are infeasible. Nevertheless, they should help you see the differences between each category.

KNOWLEDGE: Students recall, recognize, or remember specific items, information, objectives, terminology, attributes, and so forth.
COMPREHENSION
APPLICATION
ANALYSIS
SYNTHESIS
EVALUATION

Sample KNOWLEDGE objectives:

1. *Students will be able to name all parts of a standard V-8 engine.*
2. *Students will be able to define free enterprise system, mixed economic system, and state-controlled economic system.*

Check which of these are knowledge objectives(s):

a. ___ Students will point out any logical fallacies in given arguments for and against the legalization of marijuana.

b. ___ Students will give three reasons why marijuana might be considered a dangerous drug.

c. ___ Students will correctly define distortion, hallucination, and drug tolerance.

(Answers on next page.)

ANSWERS

a. ___ Students will point out any logical fallacies in given arguments for and against the legalization of marijuana.

b. _X_ Students will give three reasons why marijuana might be considered a dangerous drug.

c. _X_ Students will correctly define distortion, hallucination, and drug tolerance.

KNOWLEDGE	
COMPREHENSION:	Students demonstrate understanding of concepts by perceiving and/or identifying the meaning of material presented to them, see relationships, describe in their own words, and draw conclusions.
APPLICATION	
ANALYSIS	
SYNTHESIS	
EVALUATION	

Sample COMPREHENSION objectives:

1. *Students will be able to explain in their own words the functions of each part of a standard V-8 engine and the relationship of parts to one another.*

2. *Students will give an oral report on the economy of a country of their own choice explaining why they think the country is an example of a free enterprise, mixed, or state-controlled economic system.*

Check which of these are COMPREHENSION objectives(s):

a. ___ Students will describe or illustrate the disruption of natural ecological cycles resulting from the introduction of man-produced chemical agents into the biosphere.

b. ___ Students will conduct a botanical experiment demonstrating the disruption of natural ecological cycles resulting from the introduction of man-produced chemical agents into the biosphere.

(Answers on the next page.)

ANSWERS

a. X Students will describe or illustrate the disruption of natural ecological cycles resulting from the introduction of man-produced chemical agents into the biosphere.

b. ___ Students will conduct a botanical experiment demonstrating the disruption of natural ecological cycles resulting from the introduction of man-produced chemical agents into the biosphere.

(Objective b is an APPLICATION objective.)

KNOWLEDGE
COMPREHENSION
APPLICATION: Students select and use one or more learned principles to produce or alter something; select and use formulas to solve problems; select and use appropriate rules or procedures to work on material.
ANALYSIS
SYNTHESIS
EVALUATION

Sample APPLICATION objectives:

1. *Students will be able to correctly assemble a standard V-8 engine.*

2. *Given a particular economic development problem of an underdeveloped country, students will be able to suggest ways of solving the problem using methods consistent with the free enterprise system, the mixed economic system or the state-controlled system.*

Check which of these are APPLICATION objectives(s):

a. ___ Students will describe methods of good hair grooming.

b. ___ Students will list ten types of hairstyles and indicate their current popularity.

c. ___ Students will style a client's hair to the client's satisfaction, taking into consideration the client's facial contour and hair color and texture.

(Answers on next page.)

ANSWERS

a. ___ Students will describe methods of good hair grooming.

b. ___ Students will list ten types of hairstyles and indicate their current popularity.

c. _X_ Students will style a client's hair to the client's satisfaction, taking into consideration the client's facial contour and hair color and texture.

(Objective a is COMPREHENSION, and objective b is KNOWLEDGE.)

KNOWLEDGE
COMPREHENSION
APPLICATION
ANALYSIS: Students distinguish constituent parts of ideas, materials, or a communication; determine relationships of the parts; recognize the form, structure, or organizational principles of the ideas, materials, or communication.
SYNTHESIS
EVALUATION

Sample ANALYSIS objectives:

1. *Students will be able to examine an unfamiliar engine, explain how it functions, and demonstrate how it differs from the standard V-8 engine.*

2. *Given descriptions of economic systems of contemporary countries, students will be able to determine whether the descriptions are consistent with any of the three economic systems they have learned and, if not, be able to explain the inconsistencies.*

Check which of these are ANALYSIS objective(s):

a. ___ Given an article or poem to read, students will determine the author's purpose and point out the various techniques used by the author to achieve that purpose.

b. ___ Given three articles or poems related to the same point or purpose, students will be able to select the one that best gets the point across and explain their reasoning.

(Answers on next page.)

ANSWERS

a. _X_ Given an article or poem to read, students will determine the author's purpose and point out the various techniques used by the author to achieve that purpose.

b. ___ Given three articles or poems related to the same point or purpose, students will be able to select the one that best gets the point across and explain their reasoning.

(Objective b is an EVALUATION objective.)

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KNOWLEDGE
COMPREHENSION
APPLICATION
ANALYSIS
SYNTHESIS: Students produce a unique plan, communication, or set of abstract relationships; produce, use or alter something in a form or manner that in some way goes beyond any existing structures or principles of which they are aware.
EVALUATION

Sample SYNTHESIS objectives:

1. *Students will be able to design an automobile engine that will function according to predetermined specifications, but is different from any engine they have ever learned about.*

2. *Given a description of an economic problem of a simulated country, students will devise a 10-year economic improvement plan that suits the needs and characteristics of the country. The plan may combine elements of the free enterprise, mixed or state-controlled system, but should not be a duplication of any plan the students have learned about.*

Check which of these are SYNTHESIS objective(s):

a. ___ Using a rhyme dictionary if necessary, students will write a rhyming poem or song lyric of at least eight lines applying whatever rhyme pattern they wish.

b. ___ Given several examples of song lyrics and poems, students will correctly identify and explain the rhyme patterns found within each.

(Answers on next page.)

ANSWERS

a. _X_ Using a rhyme dictionary if necessary, students will write a rhyming poem or song lyric of at least eight lines applying whatever rhyme pattern they wish.

b. ___ Given several examples of song lyrics and poems, students will correctly identify and explain the rhyme patterns found within each.

(Objective b is an ANALYSIS objective.)

KNOWLDEGE
COMPREHENSION
APPLICATION
ANALYSIS
SYNTHESIS
EVALUATION: Students judge the value of ideas, solutions, materials, methods, etc., using their own or given criteria and standards; appraise the extent to which things are accurate, effective, satisfying, efficient, practical, etc.

Sample EVALUATION objectives:

1. *Given examples of three different types of automobile engines, students will be able to determine which of the three would most effectively contribute to the reduction of air pollution.*

2. *Given one particular economic problem of an underdeveloped country and three alternative ways of approaching the problem, one representing free enterprise, another, mixed, the third, state-controlled, students will judge which alternative would most effectively solve the problem based on their own or established criteria.*

Check which of these are EVALUATION objective(s):

a. ___ Students will judge whether a curricular objective is feasible, relevant, and provides guidance given proper information for such judgment.

b. ___ Students will rewrite unacceptable objectives so that they meet the criteria of guidance, relevance, and feasibility.

c. ___ Students will decide whether a curricular objective should be accepted, rejected, or revised on the basis of its guidance, relevance, or feasibility.

(Answers on next page.)

ANSWERS

a. _X_ Students will judge whether a curricular objective is feasible, relevant, and provides guidance given proper information for such judgment.

b. ___ Students will rewrite unacceptable objectives so that they meet the criteria of guidance, relevance, and feasibility.

c. _X_ Students will decide whether a curricular objective should be accepted, rejected, or revised on the basis of its guidance relevance, or feasibility.

(Objective b is a SYNTHESIS objective.)

Review the levels of taxonomy, if necessary, and turn to the self-tests on the following pages. They are designed to increase your familiarity in using the taxonomy. You may use the taxonomy on page 4 when taking the test.

Self-Test I

Classify this list of cognitive behaviors according to Bloom's taxonomy.

Behaviors	Classification
1. Catch on, classify, explain in own words.	
2. Rate, judge, assess, appraise, grade.	
3. Memorize, name, define, list.	
4. Alphabetize, draw conclusions.	
5. Determine relationships, dissect, examine.	
6. Fabricate, improvise, originate, build from scratch, formulate, design, devise.	
7. Experiment, use formula to solve problem, utilize.	
8. Perceive implicit meaning, detect, distinguish fact from fiction.	

TURN TO ANSWERS ON NEXT PAGE

Self-Test I Answers

Classify this list of cognitive behaviors according to Bloom's taxonomy.

	Behaviors	Classification
1.	Catch on, classify, explain in own words.	*Comprehension*
2.	Rate, judge, assess, appraise, grade.	*Evaluation*
3.	Memorize, name, define, list.	*Knowledge*
4.	Alphabetize, draw conclusions.	*Comprehension*
5.	Determine relationships, dissect, examine.	*Analysis*
6.	Fabricate, improvise, originate, build from scratch, formulate, design, devise.	*Synthesis*
7.	Experiment, use formula to solve problem, utilize.	*Application*
8.	Perceive implicit meaning, detect, distinguish fact from fiction.	*Analysis*

NEED MORE PRACTICE? GO ON to Self-Test II on next page. Same procedures.

Self-Test II

	Behaviors	Classification
1.	Recollect, learn by heart, name, recall, remember.	______________
2.	Use, employ, put in practice.	______________
3.	Diagnose, infer, establish cause and effect relationships.	______________
4.	Translate, grasp, discern, be aware of.	______________
5.	Invent, create, revolutionize.	______________
6.	Figure out how it works, identify unstated assumptions.	______________
7.	Recognize artistic qualities, censure, rank.	______________
8.	Contrive, concoct, combine.	______________
9.	Critique, weigh values, esteem.	______________
10.	Explain the meaning, interpret given data.	______________

TURN TO ANSWERS ON NEXT PAGE

Self-Test II Answers

	Behaviors	Classification
1.	Recollect, learn by heart, name, recall, remember.	*Knowledge*
2.	Use, employ, put in practice.	*Application*
3.	Diagnose, infer, establish cause and effect relationships.	*Analysis*
4.	Translate, grasp, discern, be aware of.	*Comprehension*
5.	Invent, create, revolutionize.	*Synthesis*
6.	Figure out how it works, identify unstated assumptions.	*Analysis*
7.	Recognize artistic qualities, censure, rank.	*Evaluation*
8.	Contrive, concoct, combine.	*Synthesis*
9.	Critique, weigh values, esteem.	*Evaluation*
10.	Explain the meaning, interpret given data.	*Comprehension*

B. Determining Appropriateness of Cognitive Behaviors

Once you know what kinds of cognitive behaviors are in your set, decide if the representation and emphasis of these behaviors are appropriate by examining the following:

1. Goals and Indicators
2. Characteristics of Students (abilities, needs, interests)
3. The Nature of the Subject Matter

1. GOALS AND INDICATORS

Generally the levels of cognitive behavior you wish to emphasize in your set are implied, if not explicitly stated, in either your goals or your indicators, or both.

Check off the levels of cognitive behavior you feel are implied in the following indicators:

a. Students will be able to analyze, interpret, and evaluate experimental results, observations, reading selections, and other sources of information to arrive at generalizations and conclusions.

____ KNOWLEDGE
____ COMPREHENSION
____ APPLICATION
____ ANALYSIS
____ SYNTHESIS
____ EVALUATION

b. Students will become skillful in locating reference materials, securing needed information, and determining if the information is accurate and appropriate.

____ KNOWLEDGE
____ COMPREHENSION
____ APPLICATION
____ ANALYSIS
____ SYNTHESIS
____ EVALUATION

ANSWERS

a. Analysis and Evaluation behaviors are explicitly called for in this indicator. Comprehension skills are also called for when the indicator states "interpret" and "arrive at generalizations and conclusions."

b. The best answer would be Comprehension, Application, and Evaluation.

To become skillful in locating reference materials and securing needed information implies that students must comprehend the process of doing library research and then actually do it (apply what they learn). Evaluation skills are implied in the statement "determining if the information is accurate and appropriate."

2. CHARACTERISTICS OF STUDENTS

When determining the adequacy of cognitive representation and emphasis, one must also take into consideration the abilities, needs, and interests of the students who are to achieve the objectives.

You are planning an English program for underachieving 11th grade students who are far below average in reading and writing skills and are generally unmotivated by school.

- Would you create a set of objectives that emphasizes SYNTHESIS and EVALUATION skills and includes some ANALYSIS objectives?

...if yes, turn to page 24 A.

- Would you create a set of objectives that emphasizes KNOWLEDGE and COMPREHENSION and includes some APPLICATION and SYNTHESIS objectives?

...if yes, turn to page 24 B.

- Would you create a set of objectives that emphasizes KNOWLEDGE objectives and includes one objective from each of the other levels?

...if yes, turn to page 24 C.

ANSWERS

24 A

Considering the students' abilities, this choice is questionable. Students who are poor readers and writers might be creative (able to synthesize) but not through reading and writing in an English class. Evaluation is a type of behavior that requires students to be able to know, comprehend, apply, analyze, and synthesize, which most of these students, because of their reading and writing problems, would not be able to do very well.

Select another alternative.

24 B

CORRECT

To improve their reading and writing skills in an English class, these students would have to achieve many KNOWLEDGE and COMPREHENSION objectives, and these you would probably emphasize. However, to make sure that what they learn is reinforced through doing, you would want students to try to apply what they learn. And to make sure the students stay motivated and begin to appreciate what they could do with what they learn, you would probably want to encourage some creativity (have them write their own stories, rock music lyrics, or whatever--which is SYNTHESIS).

24 C

It's understandable why you selected this alternative. Students would definitely have to achieve some basic KNOWLEDGE skills in order to improve their reading and writing skills. However, it is often the case that when students are expected to learn only facts, principles, and rules, without being encouraged to do anything with them, not even comprehend them, the students (especially unmotivated 11th graders) have a tendency to read Playboy behind their texts, doodle psychedelically, secretly listen to transistor radios, and generally not learn much. The alternatives did state that there would be one objective at each of the other cognitive levels, but there is no really good reason to arbitrarily plan to have each level represented.

Considering the student characteristics, KNOWLEDGE would not be an appropriate emphasis.

Select another alternative.

3. THE NATURE OF THE SUBJECT MATTER

The third item you consider when determining the appropriateness of cognitive behavior representation and emphasis is the nature of the subject matter.

For example, a course in creative writing or musical composition would more likely have a greater number of SYNTHESIS objectives than would a course in basic English or music appreciation.

Or, an elementary reading course would more likely emphasize KNOWLEDGE and COMPREHENSION skills, whereas a literature survey course would emphasize COMPREHENSION, ANALYSIS, and perhaps EVALUATION.

What kinds of cognitive behaviors
would be appropriate to emphasize
for a third grade spelling course?

____ KNOWLEDGE
____ COMPREHENSION
____ APPLICATION
____ ANALYSIS
____ SYNTHESIS
____ EVALUATION

(Answers on next page.)

ANSWERS

KNOWLEDGE, COMPREHENSION, and APPLICATION would be the best answers. You would definitely want students to remember how to spell words (KNOWLEDGE) as well as remember some basic spelling rules. You would also expect students to be able to correctly spell the words they've learned when writing communications, and to apply spelling rules to words they are not familiar with (APPLICATION).

If you checked ANALYSIS, you may have been thinking of the term "word analysis" but most word analysis skills fall under the category of COMPREHENSION.

If you checked SYNTHESIS, you're in trouble. Students may invent their own way of spelling words.

If you checked EVALUATION, you're asking for a spelling revolution. If students evaluated English spelling, many would conclude that it is not very effective, satisfying, efficient, or practical.

Self-Test

1. You're planning a course in basic science for suburban 9th grade students who are average or above average in intelligence and abilities and are highly motivated to learn and experiment. Your goal is to teach them to solve problems using the scientific method.

   What cognitive behaviors would you emphasize most in your set of objectives?

   ____ KNOWLEDGE
   ____ COMPREHENSION
   ____ APPLICATION
   ____ ANALYSIS
   ____ SYNTHESIS
   ____ EVALUATION

2. You're planning a high school art course in oil painting and watercolor. Your students are of varying levels of intelligence, age, and ability. Some have artistic ambitions and talent; others just think the course would be fun.

   Your aim is to encourage self-expression and creativity, but you also want students to become better able to judge works of art on the basis of recognized criteria of artistic excellence.

   What kinds of behaviors would your set emphasize?

   ____ KNOWLEDGE
   ____ COMPREHENSION
   ____ APPLICATION
   ____ ANALYSIS
   ____ SYNTHESIS
   ____ EVALUATION

(Answers on next page.)

Self-Test Answers

1. You should have checked COMPREHENSION and APPLICATION.

   According to your goal, you would want students to understand (comprehend) the scientific method and be able to apply it to solving various problems. Your set should contain objectives from other levels of the taxonomy, but COMPREHENSION and APPLICATION could be the behaviors you would represent the most.

2. The best answers would be SYNTHESIS (for the creativity and self-expression aim) and EVALUATION (able to judge works of art...).

   Of course you want to have COMPREHENSION (understanding techniques, seeing relationships, identifying meaning), APPLICATION (applying learned techniques), and ANALYSIS (recognizing form, structure, principles) objectives in your set, but under the circumstances you would want to emphasize SYNTHESIS and EVALUATION.

SUMMARY: PART ONE

To determine whether you have an adequate set of objectives consider:

1. THE APPROPRIATENESS OF THE REPRESENTATION OF COGNITIVE BEHAVIORS.
2. The adequacy of representation of affective behaviors.
3. The adequacy of subject matter coverage.

To determine whether the representation and emphasis of cognitive behaviors in your set are appropriate, consider:

- THE GOALS AND INDICATORS
- CHARACTERISTICS OF STUDENTS (abilities, needs, interests)
- THE NATURE OF THE SUBJECT MATTER

PART TWO: ADEQUATE REPRESENTATION OF AFFECTIVE BEHAVIORS

The second point to consider in analyzing a set of objectives is whether it contains adequate representation of affective behaviors. To do this you have to determine what kinds of affective behaviors (if any) you have in the set.

A. Determining Types of Affective Behaviors

Affective behaviors are those relating to attitudes, feelings, commitments, and formation of values.

The Krathwohl taxonomy* classifies affective behaviors as follows:

RECEIVING
RESPONDING
VALUING
ORGANIZATION
CHARACTERIZATION BY VALUE OR VALUE COMPLEX

If you know what these terms mean and have used this taxonomy before, turn to page 38. Otherwise, turn to the next page.

RECEIVING is the lowest level in this taxonomy; CHARACTERIZATION BY VALUE OR VALUE COMPLEX is the highest.

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*David R. Krathwohl, et al. Taxonomy of Educational Objectives: Handbook II: Affective Domain. New York: David McKay, 1964. We will be using a simplified version of Krathwohl's taxonomy. There are others, but this one seems to be the one used most often.

This is a simplified version of Krathwohl's taxonomy. You are encouraged to refer to it when completing pages 32 to 37 .

RECEIVING:	Students pay attention, are willing to listen and look.
RESPONDING:	Students are willing to comply with regulations, are actively interested, and enjoy participation.
VALUING:	Students attach worth to activity, assume active responsibility and demonstrate a stable commitment to the activity or belief.
ORGANIZATION:	Students form judgments about new values and organize them into a priority system.
CHARACTERIZATION BY VALUE OR VALUE COMPLEX:	Students selectively and consistently respond to a variety of stimuli according to a value system, are willing to revise judgments in light of evidence, are willing to judge problems in terms of situations, issues, and consequences rather than in terms of fixed, dogmatic precepts or wishful thinking.

Here are some examples:

RECEIVING:	The student will develop a tolerance for classical music and will listen to classical recordings in class.
RESPONDING:	The student will voluntarily listen to classical recordings that have been purchased or borrowed from the music library.
VALUING:	The student will make an effort to attend classical concerts whenever possible.
ORGANIZATION:	The student will decide that classical music is one of the most important things in his or her life and demonstrate this by spending free time playing an instrument, participating in music clubs, raising funds for the local symphony, etc.
CHARACTERIZATION BY VALUE OR VALUE COMPLEX:	The student will make a commitment to becoming a professional classical musician or music critic.

To put it simply, at the lowest level of the affective taxonomy, the student develops a basic awareness and tolerance of the phenomenon. At the next level he or she begins to respond to or attend to the phenomenon with feeling. At the third level, the student bends over backwards to attend to the phenomenon. At the next level the student conceptualizes his or her attitudes and behaviors and organizes these into a structure. At the highest level, the structure becomes part of the student's life outlook.

Note that adequate representation of affective objectives does not refer to the quantity of affective objectives in relation to cognitive objectives in the set. It is posssible that one or two affective objectives are broad enough in scope to balance out with several cognitive objectives.

FOR EXAMPLE:

A secondary math program's set of objectives contained many KNOWLEDGE, COMPREHENSION, and APPLICATION objectives dealing with computation skills, understanding of math principles, and using principles and concepts in solving problems. It also contained a few ANALYSIS, SYNTHESIS, and EVALUATION objectives. There were only three affective objectives but the scope of the objectives was such that they balanced out with the rest of the set. They were:

VALUING:	The student will develop an extrinsic appreciation of mathematics as being a socially useful science and as being necessary for ordinary communication and conduct in business.
ORGANIZATION:	The student will develop an intrinsic appreciation of mathematics as being somewhat of an art because of the power and beauty of its logic.
RESPONDING AND VALUING:	The student will enjoy talking about mathematics with others and will be anxious to teach his friends about new ideas and discoveries he has made in mathematics.

B. Determining Adequacy of Affective Behaviors

To determine whether you have an adequate representation of affective objectives, you consider three things:

1. Goals and Indicators
2. The Nature of the Subject Matter
3. Responses from Students, Staff or Other Important Groups.

1. GOALS AND INDICATORS

Many times affective outcomes are implied, if not explicitly stated, in either your goals or your indicators or both.

For example, would you say affective outcomes were implied by this indicator?

> Students will acquire an understanding and appreciation of the Water Conservation Program so that they will accept the system and comply with its regulations.

____ Yes ____ No

(Answer on page 34 .)

2. NATURE OF THE SUBJECT MATTER

The nature of the subject matter has a lot to do with the quantity and types of affective objectives that are included in a set of curricular objectives. For example, teachers of music appreciation would probably expect their students to achieve more affective objectives than would teachers of beginning typing.

Here is a list of high school programs for different subjects. It would be important to plan affective objectives for all of these programs. But, in TWO cases, planners would be practically defeating their purposes were they to neglect to include affective objectives in their set. WHICH TWO?

____ Algebra
____ Drug Education
____ Chemistry
____ Tennis
____ Family Relations

(Answer on page 34 .)

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3. RESPONSES OR REACTIONS FROM STUDENTS, STAFF, OR OTHER IMPORTANT GROUPS

For example, if you learned from teacher reports or parent complaints that students were unmotivated to attend certain classes, it would be a good clue that you ought to be thinking about improving their attitudes toward the subject.

If students have organized a sit-down strike because they feel their classes are irrelevant, you should, of course, be checking your cognitive objectives, but you should also consider affective objectives concerning student appreciation of the subjects they are learning in school.

Imagine you are revising sets of curricular objectives for your high school's advanced foreign language courses. The original sets contain some affective objectives, but you suspect that the representation is not adequate. Check off all the responses below that might lead you to this conclusion.

____ Complaints from teachers that many students were not completing their language assignments.

____ Information that graduates from your high school were not enrolling in language courses at the local community college.

____ A report that no one from your high school has applied to participate in the national foreign student exchange program in over three years.

____ Requests for additional materials from language teachers.

(Answer on next page.)

ANSWERS

1. YES. Developing an appreciation implies VALUING objectives. Accepting and complying with regulations implies RESPONDING objectives.

2. Drug Education and Family Relations are the best answers. Practically every program that has ever dealt with these subjects (no matter how different the approach) has been primarily designed and implemented to assure that students make rational value decisions concerning drugs, marriage, sex, and their personal behavior relative to these matters.

3. X Complaints from teachers that many students were not completing their language assignments.

X Information that graduates from your high school were not enrolling in language courses at the local community college.

X A report that no one from your high school has applied to participate in the national foreign student exchange program in over three years.

___ Requests for additional materials from language teachers.

Self-Test

1. Check off the sources of information that would help you decide on the adequacy of your affective objective representation.

____ Indicator saying students should attain particular intellectual skills in the subject matter.

____ A magazine article on "Are Schools Brainwashing Our Kids?"

____ Complaints from parents that students are not interested in the course.

____ A list of recommendable Responding and Valuing objectives written by an expert in the particular subject.

____ A school paper editorial praising the improvement in school spirit at football games.

____ Complaints from teachers that students are unmotivated.

____ Reports from a salesman claiming that his product is highly motivating to all students.

2. Which THREE items would you consider in determining the adequacy of affective objective representation in a set of curricular objectives?

____ Budgetary restraints

____ Goals and indicators

____ Internal consistency

____ The nature of the subject

____ Facilities, such as buildings, equipment, etc.

____ The affective taxonomy

____ Responses from staff, subject matter experts, students, parents, community.

(Answers on next page.)

Self-Test Answers

1.

____ Indicator saying students should attain particular intellectual skills in the subject matter.

____ A magazine article on "Are Schools Brainwashing Our Kids?"

_X__ Complaints from parents that students are not interested in the course.

_X__ A list of recommendable Responding and Valuing objectives written by an expert in the particular subject.

____ A school paper editorial praising the improvement in school spirit at football games.

_X__ Complaints from teachers that students are unmotivated.

____ Reports from a salesman claiming that his product is highly motivating to all students.

2.

____ Budgetary restraints

_X__ Goals and indicators

____ Internal consistency

_X__ The nature of the subject

____ Facilities, such as buildings, equipment, etc.

____ The affective taxonomy

_X__ Responses from staff, subject matter experts, students, parents, community.

If you did not answer correctly, review again pages 30 to 33 .

SUMMARY: PART TWO

To determine whether you have an adequate set of objectives, consider:

1. The appropriateness of the representation of cognitive behaviors.
2. THE ADEQUACY OF REPRESENTATION OF AFFECTIVE BEHAVIORS.
3. The adequacy of subject matter coverage.

To determine the adequacy of representation of affective objectives in a set, consider:

- THE GOALS AND INDICATORS
- THE NATURE OF THE SUBJECT MATTER.
- RESPONSES FROM STUDENTS, STAFF, OR OTHER IMPORTANT GROUPS.

PART THREE: ADEQUACY OF SUBJECT MATTER COVERAGE

A third thing to look for in analyzing a set of objectives is the adequacy of subject matter coverage. This is not a new concept. You have probably always been concerned with comprehensiveness.

In determining whether your set of objectives is comprehensive enough for your purposes you should consider such factors as:

- YOUR GOALS AND INDICATORS
- THE NEEDS AND INTERESTS OF THE STUDENTS
- THE NEEDS AND DESIRES OF CONSTITUENT GROUPS (parents, taxpayers, future employers, institutional requirements)
- OPINIONS OF SUBJECT MATTER EXPERTS AND STAFF MEMBERS

Another thing you might have to consider is REQUIREMENTS OF FEDERAL, STATE, OR LOCAL GOVERNMENTS as to what should be included in certain courses.

Naturally, if all 12th grade students have to pass a test in state government before graduating, your objectives for a social studies class ought to include those subject matter areas the state expects them to know about.

SUMMARY: PART THREE

To determine whether you have an adequate set of objectives, consider:

1. The appropriateness of the representation of cognitive behaviors.
2. The adequacy of representation of affective behaviors.
3. THE ADEQUACY OF SUBJECT MATTER COVERAGE.

To determine whether the set adequately covers the subject matter you should consider:

- THE GOALS AND INDICATORS
- THE NEEDS AND INTERESTS OF THE STUDENTS
- THE NEEDS AND DESIRES OF THE SCHOOL COMMUNITY
- OPINIONS OF SUBJECT MATTER EXPERTS AND STAFF MEMBERS

FINAL SUMMARY

By now you should know the three factors for analyzing sets of curricular objectives:

1. THE APPROPRIATENESS OF THE REPRESENTATION OF COGNITIVE BEHAVIORS.
2. THE ADEQUACY OF REPRESENTATION OF AFFECTIVE BEHAVIORS.
3. THE ADEQUACY OF SUBJECT MATTER COVERAGE.

You should also know how to assess the adequacy of a set of objectives in terms of the above three factors:

To determine if a set of objectives has an APPROPRIATE REPRESENTATION OF COGNITIVE BEHAVIORS, refer to the following sources of information:

- the goals and indicators
- characteristics of students
- the nature of the subject matter

To determine if your set of objectives contains an ADEQUATE REPRESENTATION OF AFFECTIVE BEHAVIORS, consider:

- the goals and indicators
- the nature of the subject matter
- responses of students, staff or other important groups

To determine whether a set of objectives ADEQUATELY COVERS THE SUBJECT MATTER, consider:

- the goals and indicators
- the needs and interests of the students
- the needs and desires of the school community (parents, taxpayers, future employers, institutional requirements)
- opinions of subject matter experts and staff members

APPENDIX B

SAMPLE LEARNING PLANS

SAMPLE LEARNING PLAN #1*

Experience-Based Career Education

STUDENT PROJECT PLAN

STUDENT ______ PROJECT NO. 4 PACKAGE Social Science

LC APPROVAL ______ DATE ______ DATE PROJECT STARTED Feb. 2, 1978

TECHNICAL ADVISOR(S) *(If any)* ______

I. PROJECT DESCRIPTION

A. *Title* The Right to Privacy

PLANNED CREDITS		EBCE Credits
Subject Area(s)	*1.* American Government	.5
	2.	
	3.	

B. *Theme* *(Please give a brief description of your project)* I plan to investigate the American idea of "the right to privacy." I am interested in how the traditions developed and where we are today with this issue. I also want to explore the careers of F.B.I. Agent and political organizer.

C. *Questions to be Investigated:* What does "right to privacy" mean? Is it the same all over the world? Where does our tradition come from? Is it (privacy) being violated today? How? By whom? Are violations to some people's privacy necessary for the protection of other people? Is the "right to privacy" being abused? What is the role of government to protect us and our rights? Does the Constitution discuss this issue? Are all the people being treated equally?

FOR LEARNING COORDINATOR USE ONLY

Mid-Term Review ______ *Initials* *Date*	*End-of-Term Review* ______ *Initials* *Date*

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* Actual secondary student contract from Castro Valley High School Experience-based Program, prepared by Jeanne Squires, 1978.

SAMPLE LEARNING PLAN #1

STUDENT PROJECT PLAN | *Page 2 of 4*

II. IDENTIFICATION OF RPs, ROs, & CRs

A. Completed Visits (Identify resources already visited for Orientation)

Resource Name	*Address*	*Phone*	*RP*	*RO*	*CR*	*Hours Spent*
Cong. Black's Off.	Brookdale		X			2
Union Corp.	San Francisco			X		6
City Bank	Martinsville		X			4

B. Planned Visits (Identify the resources you PLAN to work with. Repeat names from above if you plan additional visits. Your project MUST include an Exploration with at least one RP or RO.)

Resource Name	*Address*	*Phone*	*Acty *Level*			*RP*	*RO*	*CR*	*Est. Hours*
			O	*E*	*I*				
Union Corp.					X		X		12
City Bank					X	X			10
Cong. White's Off.			X						2
Franchise Tax Board			X						2
Social Security Off.			X						2
Cong. Black's Off.				X					5

** O = Orientation; E = Exploration; I = Investigation*

C. Related Reading/Research (Give Titles and Authors) The Right to Privacy by Otis Williams, 1984 by George Orwell, Search and Seizure by The Institute for Fundamental Freedoms.

III. SPECIAL REQUIREMENTS OR PREREQUISITES NECESSARY FOR SITE VISITS *(See Resource Guides. Some sites require special insurance, health certificates, etc.)*

A. Prequisites ______

B. Materials or Equipment ______

IV. ESTIMATED TIME REQUIRED FOR THE FOLLOWING ACTIVITIES

A. Site Visits 45 *Hrs.* *Product Production* 20 *Hrs.*

B. Reading 18 *Hrs.* *Other (specify)* ______ *Hrs.*

TOTAL HOURS 83

LAST DATE FOR COMMITMENT TO COMPLETE PROJECT ______

PLANNED PROJECT COMPLETION DATE ______

SAMPLE LEARNING PLAN #1

STUDENT PROJECT PLAN - GOALS, INDICATORS, AND EVALUATION

Page 3 *of* 4

Student ______________ *LC* ______________ *Project Title* The Right to Privacy

Goals and Indicators	*For Indicators*		*For Evaluator's Use*		
	Due Date	*Evaluator*	*Date*	*Initials & Rating*	*Comments*
GOAL 1: Research the British and American historical background for the traditional right of privacy.					
a. Trace the steps that English-speaking people have taken to gain the present rights for privacy by creating a time line.	Feb. 21	teacher			
GOAL 2: Determine the extent to which the schools, F.B.I., Food & Drug Adm., and the police are invading our privacy today.					
a. List the violations of privacy by at least 4 government bodies. Provide examples of interesting cases.	Mar. 1	teacher			
b. Construct a survey that will discover what students know of their privacy rights and if those rights are being violated.	Mar. 7	Susan Ross			
c. Compile, analyze, and graphically represent findings and present them to the American Government Seminar.	Mar. 24	Government Seminar Students			
GOAL 3: Evaluate the current proposed legislation concerning citizens' privacy.					

USE AS MANY COPIES OF THIS PAGE AS ARE NECESSARY

SAMPLE LEARNING PLAN #1

STUDENT PROJECT PLAN - GOALS, INDICATORS, AND EVALUATION	*Page* 4 *of* 4

Student ____________ *LC* ____________ *Project Title* The Right to Privacy

Goals and Indicators	*For Indicators*		*For Evaluator's Use*		
	Due Date	*Evaluator*	*Date*	*Initials & Rating*	*Comments*
(cont'd)					
a. Write a research paper that compares two current proposed solutions to invasion of privacy and determine which solution is most desirable from my own viewpoint.	Mar. 31	Ray Miller teacher			
GOAL 4: Analyze the careers of an F.B.I. agent and an aide to a legislator.					
a. Discuss these two careers with my Advisor in terms of the skills, knowledge, and experience required; their rewards and benefits; and prospects for employment and advancement.	Feb. 17	teacher			
b. Based on my discussion with my Advisor and what I learned about these careers during my resource visits and research, I will write an essay explaining why I would or would not like to pursue each of them.	Feb. 28	Ray Miller			

USE AS MANY COPIES OF THIS PAGE AS ARE NECESSARY

SAMPLE LEARNING PLAN #2 *

A COLLEGE LEARNING CONTRACT

Student's Name (last name first)	Social Security #	Contract #
Address	Contract begins	Contract ends
	Teacher's Name	
Phone (home) (work)	Learning Center/Unit	

Give detailed description of (a) Student's General Goals, or aspirations; (b) Specific Objectives of this Contract; (c) Learning Activities to be undertaken and schedule by which they will be pursued; and (d) methods and criteria for Evaluation. Use the underlined words as headings for the four sections of the Contract, and attach additional pages as necessary.

STUDENT'S GENERAL GOALS:

Ms. Gray is a legal investigator, and is heavily involved in community work and in prisoners' rights. She wants to acquire both the prerequisite credentials and the competencies essential for entry into law school.

SPECIFIC OBJECTIVES AND LEARNING ACTIVITIES:

Ms. Gray's activities and studies will lie in several categories, some of which intersect:

1. Legal research. Her work at the Community Legal Center was mostly in civil proceedings. She is presently learning how to do legal research in the area of class action suits and criminal proceedings. She will be working closely with several lawyers at the Center to develop skills in this area.

2. Prisoners' rights. Ms. Gray has a continuing interest in the area of prisoners' legal rights, particularly in regard to punitive actions taken against prisoners for "disciplinary" reasons. She is also concerned about educational health facilities in prisons, particularly for women prisoners. She will be reading broadly in the area of criminal justice, with a particular emphasis on these subtopics, using the College's independent study guide, Introduction to Criminal Justice, as a partial guide.

   She is, with three other persons, designing a proposal to fund a research center which would (a) provide legal aid for class action suits by prisoners, (b) provide research facilities and educational aid for prisoners to aid them in developing their individual appeals, and (c) provide training facilities for ex-prisoners in para-legal services. For this endeavor, she needs to

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* Adapted from a learning contract developed at Empire State College, New York

SPECIFIC OBJECTIVES AND LEARNING ACTIVITIES: (cont'd.)

gain background in the area of "grantsmanship" — how to write a funding proposal, how to find appropriate funding agencies, how to approach such agencies, etc. For this portion of the contract she will utilize the resources of the Foundation Center at 303 Fourth Street.

3. Other community concerns. Ms. Gray has also become involved in problems of addiction, and will continue her organizational activities in this area and attempt to integrate them with those of other individuals and organizations.

4. Poetry and public appearances. Ms. Gray has written, and is continuing to write, poetry. She will appear on a tv talk show, will attend a Conference on Women's Struggles in Hawaii, and will do several poetry readings. During this contract she will try to develop her poetry in the sense of being able to utilize it more fully as a method of self-expression. She will also try to examine the advantages and disadvantages of being a "public figure".

Bibliography (partial):

Erwin Pollack, Fundamentals of Legal Research
Jessica Mitford, Kind and Usual Punishment
Durkheim, Rules of Sociological Method
Jacquette and Jacquette, What Makes a Good Grant Proposal?
Willard Gaylin, Partial Justice
United States Department of Justice, Crimes and Victims
Franz Fanon, Wretched of the Earth
LSAT guide

EVALUATION:

Evaluation of the legal research portion of the contract will be done by the teacher, while a tutor will evaluate the poetry section. The evaluation will be based on legal activities both in the courtroom and in research efforts, on teacher-student conferences, on written critiques of readings, on a journal of activities, and on progress on a grant proposal.

Signature	Date
Student	
Teacher	
Associate Dean	

p.2 of 2

SAMPLE LEARNING PLAN #3

Interventions with Individuals - This is an example of a learning plan that was developed by an institution for a specific competency. It provides the basis for negotiation of an individualized plan by teacher and student.

Rationale:

As a worker in a helping profession, you may be making interventions into the lives of individuals. For these interventions there are a variety of approaches or techniques to choose from depending on who the client is, what the specific behavior to be changed is, and your basic assumptions about how people initiate and make changes in their behavior. This competency gives you the opportunity to choose a specific intervention approach for individuals which is of special interest to you. You will examine the approach's theoretical bases, concepts, terms, and techniques and utilize it to effect change in your client's behavior.

Competency:

Can use a specific approach to effect change with an individual.

Method of Evaluation:

You can present an oral or written description of the intervention plan which was implemented. This presentation should include a description of the approach utilized (see standard 5) and a discussion of the interaction of your personal style and assumptions about how people change with the specific approach you used. You should also include in your presentation process notes, behavioral charts, progress reports, tapes of interviews, or whatever direct evidence is appropriate to the approach utilized. If possible, a letter should be obtained from the supervisor attesting to the competence of the intervention.

Criteria:

Your demonstration should include the following:

1. Identification of the problem issue or behavior to be dealt with;
2. A thorough assessment of the problem;
3. Consideration of ethical issues involved in making an intervention in this situation;
4. Demonstration of an adequate understanding of the principles and techniques of the specific approach employed;
5. A plan and the implementation of the plan for intervention using the techniques and principles of the specific approach chosen;
6. Demonstration of your ability to communicate effectively with the client;
7. A record of progress made in the intervention;
8. Critical appraisal of the plan and ongoing revision where necessary;
9. Final evaluation of the intervention.

Standards:

1. Identification of the problem must include a specific description of the problem and those affected by it (who will gain from the intervention?)
2. Your assessment of the problem must include possible causes, possible consequences, detailed information about the history of the problem and the context in which it exists before your intervention. The sources of your information should be reliable and direct observation of the problem should be used where possible.
3. Ethical issues which must be considered prior to any intervention on your part are: you must determine that you are the appropriate person and this is the appropriate time to intervene. You must prove beyond a reasonable doubt that your personal values do not conflict with or interfere with the client's interest.
4. Your choice of intervention must be in harmony with your personal style of interaction and with the client's needs.
5. You should demonstrate general knowledge of the major theoretical bases, concepts, terms, and techniques which is consistent with current texts on the specific approach you choose.
6. The strategy plan should include a statement of realistic goals (agreed upon by you and the client if possible) and all steps (in order) to be taken to reach the goal(s).
7. Implementation of the plan must be consistent with the techniques and principles of the method chosen.
8. Records of the progress of the intervention could be either in the form of written progress reports, charts of direct observation of behavior, or records kept by the client. They should indicate clearly that you, as intervener, have been attentive to the effects of your intervention on the client during the process of the intervention.
9. The final evaluation of the intervention must include assessment of the positive and negative aspects of the intervention, your strengths and weaknesses as the intervener, any revisions made, and proposals (with rationales) for changes in the intervention which might improve its effectiveness. There should also be a discussion of the results of the intervention: Did change occur in the individual? Why or why not?

Conditions:

1. The intervention must take place in a setting acceptable to the certificate adviser, preferably a recognized agency or other human service setting where a supervisor is aware of the progress of the intervention.
2. The intervention must be implemented over a minimum of eight weeks or its equivalent.
3. The intervention may be done with others as part of a team under specific circumstances agreed to by the certificate adviser.

---

*From Whitorn, Ann and Cedrone, Loretta, "Assessing Ourselves: the Experience of the College of Public and Community Services," in *New Directions for Experiential Learning*, number 3, *Defining and Measuring Competence*, ed. Paul S. Pottinger and Joan Goldsmith, San Francisco: Jossey-Bass Inc., 1979.

SAMPLE LEARNING PLAN #4

FIELD PLACEMENT AGREEMENT *

The following student:

Name:____________________ Year Level and Major____________________

Address:____________________ Phone:____________________

is placed as a psychology field work student at:

Name:____________________ Address:____________________

Phone:________________for a total of____________hours per week for the academic year 19___. The student will work on the following days____________________________________during the hours of________________. She/he will have experience in at least the following activities:

____

____

____

What goals and objectives would you like to see the student accomplish during his placement?

____

____

Her/his primary supervisor will be:____________________________

Title and Degree:________________________

The primary supervisor will agree to meet________hours per week in direct supervision with the student.

Additional supervisors will be:

Name:____________________ Title and Degree:____________________

The primary supervisor will complete an objective comprehensive evaluation form assessing the field work student's performance at the end of the placement.

The field placement will commence________________and terminate________________.

(The academic semester begins______________and ends______________.)

Signatures:

________________________ ________________________

Primary Supervisor & Date Field Work Student & Date

____

Field Work Instructor & Date

---

*Reprinted from Fieldwork Supervisor's Manual by Rosemarie Bowler et al, San Francisco State University, 1979 by permission of the author.

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BOOK III

Monitoring Student Progress

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ACKNOWLEDGMENTS

PREFACE

This Book, Monitoring Student Progress, is part of a set of staff development materials consisting of four Books, a training Coordinator's Handbook and two 18-minute videotapes titled In Addition to the Classroom. The materials are designed for use in either pre-service or in-service staff development programs.

ABOUT THE MATERIALS

Contents

The four books in the staff development series are: Book I--Overview to Experience-Based Learning and the Facilitative Role of the Teacher, Book II--Planning with Students, Book III--Monitoring Student Progress, and Book IV--Evaluating Student Progress. Together, they present ways to improve the training process in secondary and post-secondary instructional programs and courses, dealing specifically with why and how experiential learning activities might be integrated into instructional programs or courses and how the teacher's role might be modified accordingly. Each book is comprised of reading material that introduces concepts about and procedures for experience-based training and corresponding teacher functions, guided activities to allow further exploration by trainees, and an annotated bibliography of selected source material to further stimulate the reader.

The videotapes, In Addition to the Classroom, Part I and II, describe three types of experience-based programs or activities: secondary career exploration, post-secondary internship, and a classroom-based activity. These sample programs outline some of the general characteristics of experience-based learning and illustrate the facilitative teacher functions of planning, monitoring, and evaluating.

Rationale

The materials reflect a commitment to three general assumptions about about the learning process:

- Learners should be moving toward increased responsibility for planning, decision-making, carrying out instructional decisions, and evaluating their own education. Doing so capitalizes on students' interests as well as on their potential to be self-directed in learning.
- Students vary in the ways in which learning is most efficient and effective and should have alternative learning activities and resources from which to select.
- Going beyond symbolic learning methods (reading, hearing and talking about phenomena) to include experience-based techniques (role-playing, simulations, and practice in real contexts, such as the community) enhances the quality of education.

The materials are designed to help teachers create instructional programs or courses that are consistent with these three assumptions.

Audience

Teachers who are working or anticipate working in secondary or post-secondary institutions are the intended audience. Since the materials are introductory, they will be particularly useful to both those training to become teachers and experienced teachers who are yet unfamiliar with experiential techniques (classroom or community-based). Furthermore, the materials are not directed at any one subject area, discipline, or course. Whether trainees plan to teach mathematics, history, English, psychology, chemistry, woodshop, or fire-prevention, experience-based techniques are applicable and these materials can be used or adapted.

Intended Benefits for Trainees

The materials are intended to provide trainees with:

- An introductory knowledge about experience-based learning;
- An introductory knowledge about the teacher's role as a facilitator;
- Opportunities to practice and develop skills and perspectives concerning the design and use of experience-based learning activities; and
- Opportunities to practice and develop skills and perspectives concerning certain role functions such as planning, monitoring, and evaluating student progress.

How Materials Can Be Used

Individual trainees can use the books by simply omitting all activities requiring group interaction. However, an effective method is to form a voluntary group and have a training coordinator available to schedule, make arrangements, assist participants to reflect on experiences, lead discussions, and to help assess individual progress. Group interaction is believed to be extremely important to the learning enterprise.

The books may be used selectively in a workshop of several days duration or in a course extending over several weeks. The latter arrangement is recommended, since the extended period permits participants to engage in outside-of-class or off-campus activities and allows time for the participants to reflect on experiences and, when appropriate, to practice or apply skills.

Trainees should also keep a notebook or journal recording their activities, ideas, and reactions during training. Such a record may be a useful tool for later reference when working with students or orienting other educators to experiential learning procedures.

In Addition to the Classroom is designed to orient trainees to experience-based learning as well as to serve as a stimulant for discussion concerning teacher functions.

WHAT IS THE TEACHER'S ROLE IN MONITORING EXPERIENTIAL LEARNING?

Once the learning plan has been carefully designed--based on an assessment of the student's capabilities, needs, and interests--and various experiential activities have been selected, the student is ready to begin carrying out the activities detailed in the learning plan. For the student, this transition often means taking on an increased degree of responsibility; it is a move toward student autonomy. For the teacher, the transition from planning to monitoring will present a new challenge.

During the planning phase, the teacher was directly in touch with the student. As the student begins to engage in the learning activities and assume more responsibility, the teacher must become more of a monitor. The facilitative aspect of the teacher's role broadens as he or she assumes a pivotal role in situations requiring a sensitive, flexible, and resourceful approach. For example, in addition to acting as institutional representative and consultant for the student, the facilitative teacher may also be called upon to act as a liaison with resource people at the learning site.

Although the exact nature of the monitoring process will vary widely depending on the kind of learning activity, the maturity, skill or interest of the student, and whether a resource person is involved, the process of "keeping in touch" with the student is critical to the success of the learning plan. With his experiential learning model, Kolb suggests that experience without adequate reflection will not lead to effective learning (see Book I READING). It is the teacher's role both to plan quality learning activities and to follow through by monitoring the student's progress in terms of the original goals and objectives.

What should be monitored; who should do the monitoring; and how frequently should the student be monitored? The program and its objectives will determine what is to be monitored. While the teacher is primarily responsible for conducting the monitoring activities, others--such as a resource person or some of the student's peers--may also be enlisted from time to time. The frequency of monitoring sessions can depend on such things as staff and financial resources, the needs of the student, or requirements of the program. Frequency may range from daily meetings to one meeting every week or two. Usually at least two sessions are scheduled during the course of the project, late enough to allow the student to begin the activities, but early enough to forestall or help deal with problems.

Various procedures are used during the monitoring process. The teacher may hold individual conferences with the student; talk with the student and/or with the resource person on the telephone; conduct or arrange for seminars for groups of students who are in similar programs or who have common goals or problems; ask for papers, reports, journals, or programmed learning materials to be submitted by the student; or obtain written evaluations and commentary from the resource person or the supervisor at the community site. Whatever other methods and procedures are used, the student conference is likely to be a mainstay of the monitoring process, and it is these sessions that are the focus of this section.

WHAT ARE THE PURPOSES OF MONITORING?

The basic purpose of monitoring, as in planning with students or in assessing their progress, is to facilitate learning. In order to do this, it is likely that both the teacher and the student will need to work positively and consciously toward the development and use of communication skills, enabling both participants to:

a. Clearly state personal needs; be able to express feelings; more easily to confront the other when something he or she is doing is causing a problem. These three steps will be useful:

> First, give a non-blameful description of the behavior.
> Second, give the tangible effects on you of that behavior.
> Third, give your feelings about that effect.[1]

b. Listen effectively both to the content and the feelings in a message.

c. Systematically solve problems, starting with a clear explication of the nature of the problem in terms of the needs of the agents concerned, and seek solutions which are satisfactory to all parties concerned.

d. Clarify values when it is determined that the issue is one of values rather than needs.

Another purpose of the monitoring process is to help the student derive from particular experiences, valid general principles applicable in other circumstances. The key word here is "valid," for students may try to draw generalizations based on too limited an experience. The teacher should encourage tentative conclusions or hypotheses to be tested in other situations or analyzed in light of previous convictions. Drawing valid conclusions involves other abilities as well--perceiving relationships, for example, or analyzing interpersonal interactions--and here too the student may need help from the teacher.

---

[1] See Thomas Gordon, Teacher Effectiveness Training (New York: Peter H. Wyden, 1974).

In monitoring, the teacher is also concerned with helping the student relate what is happening at a community site to what he or she has learned or is learning in the classroom, and vice-versa. Students are not always able to make the functional linkages between theory and practice, between academic learning and experiences. The student may not see the connection between the basic skills and what is happening at the site. For example:

a. Jeff is spending time at a veterinary clinic to learn about veterinary medicine, animal care, and career requirements.

b. He is also taking a course in applied mathematics and is doing poorly because he dislikes math.

c. Math skills are a functional part of what goes on at the veterinary clinic.

The teacher can help Jeff make connections between b and c above--help him perceive the relationship between the applied mathematics course and the actual use of math skills at the clinic. But reinforcement for the relevance of basic math skills will come directly out of Jeff's experience in applying them on the job, rather than from any statements made by the teacher in a classroom.

The value of the student's involvement as co-designer of a learning plan was discussed in Book II. Carrying this idea further, continued involvement will help maintain the student's enthusiasm. For example, a field experience may clarify an interest or a value the student has as personal interests, values, knowledge and assumptions are tested out, the student may learn more about him or herself. Or, the teacher may look at a field experience and see in it a way to relate some aspects of learning to the student's own personal life. The value of the field experience should always be weighed not only in terms of the learning and personal autonomy which the student develops, but also in terms of how well it supports the student's personal interests, needs, and goals. If it fails to do so, the experience-based program loses one of its basic attributes.

If the student can perceive the significance of the learning experience, he or she is more likely to be motivated to continue when difficulties occur. The teacher can encourage student motivation by giving constructive feedback about the quality of work, by pointing out its strengths and weaknesses, by discussing with the student the consequences of decisions or actions, and by making suggestions and recommendations.

Of course, even the most highly motivated person may have problems keeping the learning process going without some structure. Procrastination can be expected in experience-based programs, not only from students but from teachers as well. The teacher can stimulate the student's awareness of the need for self-motivation. However, if all else fails, the teacher may have to give directives to impose structure. If this happens, the teacher should help the student see why this is a necessary procedure.

A further purpose of monitoring is to involve the student in continual self-assessment of progress, and in review of the relationship of progress to plans. If deficiencies and obstacles require it, the teacher may assist the student in replanning and refining or revising objectives. Sometimes the need for replanning arises when an unexpected interest in some facet of an experience propels the student into a new area. The teacher then has the job of guiding the student in formulating new questions to be explored or, perhaps, establishing new learning objectives to work on within the original plan. Teacher and student can then look at the steps needed to gather the information and plan activities related to the new interest.

One aspect of experiential learning situations--that of being able to go in unforeseen directions and explore unplanned areas--can be thwarted by too rigid an adherence to the student's original goals. While it is valuable to monitor progress in terms of those goals, they should remain somewhat flexible. In the planning phase, they provided some coherence for selecting learning activities and served as pre-checks to determine what might be practical. During the monitoring phase, they can provide "touchpoints" against which to check progress and perhaps provide encouragement when the student gets stuck. But the teacher and student should also be seeking ways to extend the original goals and objectives, using the interests that grow out of site experiences as a guide.

These purposes of monitoring are served by the following teacher actions:

a. Extend the learner's level of knowledge and skills;

b. Remove problems or obstacles impeding normal progress;

c. Keep records and help the student document the learning process; and

d. Maintain an effective liaison with learning site resource people.

Each of these areas is discussed in this section.

WHAT HAPPENS DURING A MONITORING SESSION?

The individual monitoring session, while unique for each student, generally has three stages, which provide an overview structure. The first part of the session is usually devoted to debriefing: reviewing plans, past problems and successes, and determining what the student has done with regard to the site experience since the last session.

Information gathered can then be used by the teacher in the second or synthesizing part of the session: helping the student understand, interpret, and apply the learning which has occurred. Here also the teacher helps the student integrate past learning with that which is going on now. Obstacles which have been identified in the debriefing part of the session must be dealt with at this time.[2]

The final part of the session calls for replanning: providing the student with an overview or context for what comes next. Specific plans are made for what should occur before the next monitoring session, and the teacher can assist the student to connect the next step to the whole learning plan as well. A sample checklist of questions a teacher might ask in a monitoring session are listed on the following page.

Sometimes the teacher may want to organize group sessions for information sharing, feedback, or problem-solving. Several students may, for example, have common problems in a basic skill area, which could be more effectively studied in a small group where the students can derive support and insights from working together. Integration of learning may be facilitated by grouping students who, although working at different sites, are involved in similar kinds of learning programs. Pairs or groups provide the opportunity for students to teach each other.

---

[2] Examples of two monitoring sessions in a field-based program are presented in the videotape, In Addition to the Classroom, Part II: (1) an illustration of the need to replan with a student who is frustrated with her field placement and (2) an example of the synthesizing process in which the student integrates theory and practice.

Group sessions are particularly useful in student self-assessment. In assessing experientially-acquired learning, individuals tend to devalue their experiences. They are, in fact, often able to see the value in other people's experiences more easily than they can in their own. Thus, in groups they reinforce each other. In this kind of group, it is best for the teacher, as an authority figure, to stay in the background.

MONITORING CHECKLIST	YES	NO
1. Is the student involved in activities and working on products that will allow him/her to achieve his/her goal?		
2. Should the student's activities be redirected so that the original goals and objectives can be achieved?		
3. Is the student pacing his/her work in order to complete the project by the agreed upon date?		
4. Should the student's plan, goals and/or objectives be changed?		
5. Should the due date be rescheduled?		
6. Is the student participating in the appropriate seminars?		
7. Is the student keeping a journal or record of events/problems/insights?		
8. Have you checked the student's progress with his/her resource person(s)?		
9. Has the student shown his/her learning plan to his/her resource person(s)?		
10. Are there any personality conflicts with a resource person?		

WHAT TECHNIQUES CAN A TEACHER USE TO MONITOR EXPERIENCE-BASED LEARNING?

Significant learning results not only from having experiences, but also from being able to reflect upon those experiences. It is a major function of the teacher to help the student conduct that reflection and derive meaning from learning experiences, both in and out of the classroom. This process is ongoing and involves a number of interrelated, recurring techniques used by the teacher more or less all of the time. The techniques discussed here include:

1. Questioning
2. Giving feedback
3. Applying directives

The general purpose of questioning is both to provide the teacher with needed information and to get the student to reflect and make judgments. There are two reasons for attempting to instill this practice in students:

- To promote autonomous lifelong learning. The student must use the inquiry process if it is to be internalized.
- To keep the student in touch with his or her personal interests, feelings, thoughts, and investment in the experience.

Teachers can use questions in several ways:

- To elicit information about what is going on at the site, find out what the student is and is not learning, and see if there are problems.
- To get the student to reflect on, make sense of, and draw tentative conclusions about what is happening.
- To challenge assumptions, engage in dialogue, clarify, stimulate, and open doors.
- To help students comprehend possible applications and make appropriate connections.

Several things should be noted about the questioning process. First, the facilitator's questions should be aimed at getting the student to decide what the situation or problem is, to express in his or her own words what is going on or what seems to be wrong and why. Second, the questions should move from broad to specific--the very general, opening questions are followed by prompting, probing ones, as needed. For example, a teacher might initially ask the student how the project is proceeding and after a general discussion ask more specific questions about the objectives, the time line, personal observations, etc.

During this debriefing or description of activities and observations, several results are possible:

- The student may find that more (or less) is being learned than he or she previously thought.
- The student may identify one part that is particularly interesting and may want to replan.
- The student may become aware of problems or difficulties.

If the student seems to see clearly what is happening and is making sense of the experience, the teacher can reinforce that and work with him or her to clarify and build on it. If the student appears uncertain, the teacher will need to find out why and help deal with whatever cognitive and motivational problems exist. Either situation requires giving honest and constructive feedback to the student.

Giving honest constructive feedback is part of the synthesizing process in which the teacher helps the student interpret and apply the learning that is taking place or helps the student approach any obstacles to this learning. This is done by providing a realistic appraisal of the student's current abilities; assessing the quality of the ongoing learning; pointing out strengths, weaknesses, and unknowns; and offering an honest, non-judgmental acknowledgment of areas of skills that need working on. Ideally, the teacher structures ways for the student to recognize these areas by him or herself with a minimum of assistance.

At this point the teacher is also constantly reinforcing and building on the student's strengths and "successes." As part of the monitoring process, the teacher will need to build the student's confidence in his or her ability to think and act for him or herself. Nurturing the student's confidence is largely a matter of the teacher's attitude--how the teacher responds and gives the student feedback. A supportive attitude is called for, one that allows the student some latitude, but at the same time remains focused on the learning and the agreed-upon objectives.

It may sometimes be necessary to apply directives to the student. The student's interests and discoveries may not be very relevant in terms of the objectives in the plan. Does the student need to replan or to refocus? The teacher can help determine this by referring again to the plan and asking the student to reassess his or her position with respect to those goals and objectives.

The teacher may feel that the plan is a good one and that the student has not given it a chance to work, or that the student is simply looking for an easier task. In either case the teacher may wish to set some more specific parameters or impose more definite structure in the student's next activity.

The teacher needs to be sensitive to what makes a good mix of questioning, responsive feedback, and direction. Sometimes the teacher is a sounding board, sometimes highly directive. The particular technique used depends on the student's needs and the situation at hand.

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WHAT KINDS OF PROBLEMS COULD ARISE IN COMMUNITY-BASED EXPERIENTIAL ACTIVITIES?

Monitoring student learning programs over time will reveal a broad range of problems that students need assistance in resolving. While this is so in any learning enterprise, it is especially true in a community-based experiential program in which students are more on their own, and are assuming greater responsibility. Various difficulties--academic, logistical, or interpersonal--can emerge outside the classroom. The working relationship between the student and resource person may be obstructed by friction or failures in communication; the student may have trouble meeting deadlines or keeping commitments; for some unforeseen reason the student may be insufficiently prepared to be at a site; or the resource person may misunderstand the real reason for the student's being there. Sometimes the student loses interest in the original plan, or has difficulty relating the site experience to previous learning. Other times personal problems interfere with the student's learning.

In community-based experiential programs, the learning environment is not confined to a room or school building. This benefit of expansion carries with it the need for new teacher problem-solving skills. What lends greater "actuality" to problems encountered in experience-based programs, is the fact that they usually arise from and are defined by situations or contexts that exist quite apart from the needs of the student's formal learning program. The purpose of trouble-shooting in these problem situations is generally two-fold: (1) to help the student overcome a particular obstacle so he or she can get on with his or her learning project and achieve the objectives and (2) to take advantage of the dilemma in ways that will help the student become better able to confront and resolve problems independently in the future. The best way to do this is to involve the student as much as possible in the process of solution.

The teacher may be placed in the position of having to respond to a student's personal problems. The problems may be interfering in the learning process, or the student may just want the teacher's help with something that is bothersome. Each teacher will have to determine how much involvement in personal problems is appropriate. Some feel that the teacher should stay out of this area; others feel that the personal area is important, but only if it is interfering with learning. Most, if not all, would probably agree that the teacher is not qualified to handle personal problems in general and should not attempt to deal with them. In any case, when the situation arises, the teacher should be able to differentiate between a problem that is an obstacle to learning and a problem that is not directly related to the learning activities. When the problem becomes an obstacle to learning, it must be resolved. The teacher needs to be sensitive to whether he or she feels capable of advising the student or whether the student should be referred to someone else, i.e., a counselor in the school or an outside professional.

The teacher can communicate to the student his or her perception of why the problem is occupying their time. Such statements give the student the opportunity to check out the teacher's perceptions, agree or disagree with them, and participate in the next step which may be to refer to an outside source of assistance, or simply to get back to the learning task.

WHAT ARE SOME GUIDELINES FOR PROBLEM-SOLVING WITH STUDENTS IN EXPERIENCE-BASED PROGRAMS?

Much has been written about problem-solving, and many models or versions of the process are available. No single correct approach exists, the process will vary according to the style of the person doing the facilitating.[3] The aim, however, is always the same: (a) to get the student to recognize, define, and clarify the problem; (b) to identify alternative courses of action; and (c) to evaluate the options and choose the most appropriate one.

The guidelines that follow are intended as a distillation of these essential steps as applied in the context of experience-based learning. They are offered as examples, not prescriptions. There will most likely be as many different problems as there are students, but some problems seem to be common and recurring in experience-based programs. By focusing on these, it is possible to get a fix on a general process or approach a teacher can use (and refine or improve through experience) to deal with whatever problems occur.

a. Define and Clarify the Problem. A potential problem may emerge in a variety of ways: from a chance remark made in a review session, from a direct question, or from a phone call from a resource person wondering why the student is not showing up. Getting a clear grasp on the problem can be a simple or complex process. A student may simply inform a teacher:

- "Mr. Baylis says things I don't understand, and makes me feel dumb when I ask questions."
- "Mrs. Guthrie is racist."

In these cases, the first step is to ask for and weigh the evidence for the student's assertion.

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[3] The bibliography at the end of this Book contains a list for those who wish to delve further.

But sometimes a student may not realize or be able to admit there is a difficulty that needs to be, or can be, resolved. The student may not have drawn a cause-effect connection between his or her slackening involvement and an inability to comprehend Mr. Baylis. In such situations the teacher must first help the student see that a problem does exist and that action can be taken to settle it. The teacher begins with evidence of a discrepancy, asking the student to account for or explain it, working toward a definition of the problem sufficiently concrete and complete to enable both teacher and student to identify possible alternative solutions.

If the dilemma seems incomplete or vague, the teacher continues asking questions until the student's articulation of the problem reflects or takes into account all the pertinent facts, feelings, and issues any solution must confront. The process of clarification may involve considerable probing before the root of the problem is discovered. But no workable solution can be found until the problem is clearly defined.

Once the problem has been sufficiently well-defined, the teacher and student will have to determine what alternative courses of action are available and weigh their likely consequences. They will then need to decide on one and carry it out. The following are some of the teacher's options for assisting the student to deal with a problem.

b. Identify Alternative Courses of Action. A problem situation can be responded to in several general ways. For example, assume that a student is having problems with a resource person and that these problems are interfering with his or her achievement of the objectives that were devised for this field activity. What are the teacher's options in this situation?

(1) Let the student "cope" with minimum guidance. The teacher's function would be to assist the student in clarification of the problem and possible solutions, but not to advise or recommend. Assistance may include setting up a role-play practice to aid the student in developing new ways of responding to the resource person.

(2) Short circuit the student's problem-solving by suggesting some solutions or ways of handling the situation, and recommending that the student behave in particular ways.

(3) Meet with both the student and resource person to act as a facilitator to resolve the conflict or difficulty.

(4) Terminate the student's time with that resource person and place him or her where such a problem is unlikely to arise.

c. Evaluate the Options. Each of these options is likely to have quite different consequences for the student. Option 1 (minimum guidance) may result in significant gains in social competence, self-reliance, and self-image. This outcome may, however, be at the expense of the planned cognitive objectives of the field placement if the student is unable to reach any conclusions on how to handle the situation.

In a situation where Option 1 is used for an appropriate period without any satisfactory resolution, the teacher might move to Option 2 (suggest solutions). Such a sequence, if successful, may result in new insights into personal relationships, but is less likely than Option 1 to have gains in self-reliance and self-image.

Option 3 (a meeting), if successful, is also likely to result in new insight into interpersonal relationships. The student might even gain greater understanding of methods of conflict resolution through observation of the teacher as facilitator. Assuming the teacher does facilitate and not direct, the student's participation in all phases of the resolution may give him or her greater interpersonal competence and an improved self-image.

Option 4 (termination of placement) is most likely to result in an early refocusing of the student's attention on the cognitive objectives of the field placement and so hasten their achievement. This gain, however, might be at the expense of gains in social competence and self-reliance and may have a negative effect on the student's self-image in terms of the ability to handle difficult social situations.

Although there are other options as well, these four illustrate the interactive nature of the various goals of the learning process--in both cognitive and affective domains.

WHAT KINDS OF RECORD KEEPING AND DOCUMENTATION ARE NECESSARY?

Maintaining student records and seeing to it that the needed documentation of learning is accomplished are important tasks. Both are easily pushed aside in the immediacy of the learning experiences and, thus, require that the teacher pay special attention to carrying them out. The teacher will most likely coordinate both tasks, enlisting the aid of the student in keeping records and--since documentation of learning is part of the learning process itself--giving the student primary responsibility for that area.

Because of the individualized nature of experience-based education programs, there are no hard and fast rules for either task, especially for documentation. Rather, teachers will need to engage in ongoing dialogue with themselves, their students, and their colleagues about what is necessary and appropriate for each student and situation.

There are two main purposes for keeping student records. One is to provide the teacher with information useful in facilitating the student's learning; the other is to provide outside agencies, such as credit-granting constituencies and potential employers, with needed information. The information necessary for each of these two purposes may vary. Also, the information gathered for use by the facilitating teacher often contains personal data about the student which should be regarded as confidential. Therefore, a double set of files--one official and one private--should probably be set up. The official set of files would be provided to anyone on request, while the private set would be available only to the teacher.

The content of the official files is determined by what information outside agencies are most likely to be seeking, either about the individual student or about the program. In fairness to the student and the program, these files should be carefully maintained. If there is any question about what material to keep or not to keep--especially when a program is new and no guidelines have been established--it is better to keep it rather than to risk not having the required information.

Each teacher should maintain the personal files for the students. An important part of the files is a set of notes made by the teacher after each session with the student. At the time of the session, the teacher may feel that these notes are unnecessary. However, important details can be forgotten between meetings. If the teacher has a summary of a previous session, several moments can be spent before the next session reviewing the student's progress to date. These notes can also provide information when the teacher is evaluating the student's work, especially when identifying the incremental steps in the student's learning.

The teacher can also use the student files as resource collectors. Whenever the teacher finds items of interest to the student or has an idea pertinent to the student's learning plan, he or she can add them to the student's file.

Since the students will likely be operating on different calendars, the teacher may need to set up a "tickler" file, or system by which to organize reminders of important events or deadlines which must be dealt with in some way. An example would be a form to be filled out by a certain date in order for a student to be accepted into an advanced degree program. Reminders should regularly be put into the system far enough in advance so that all concerned can handle them comfortably.

Documentation of learning can take many forms, depending on the characteristics of the particular educational program and of the individual student's learning plan. Some programs provide specific forms to guide documentation; others purposely leave the choice of methods up to the teacher and the student, assuming that making the choice is in itself a learning process. It may be a creative process for the student and teacher to look together at the possible ways to best express or demonstrate what the student learns.

One basic form of documentation, referred to in Book II, is the journal. This approach seems to be valuable in many different situations. For the teacher, the journal is a documentation of what is happening at the site and of how the student perceives it and interprets it. The journal thus becomes valuable in evaluating the student's work. For the student, keeping a journal provides practice in making and recording observations and interpretations and in writing and organizing material. The journal can also serve as a resource bank, to be tapped when a paper or speech is required.

Other examples of documentation procedures include the following:

a. A student in a work-study program submits copies of all of the significant memos he or she has sent, plus tapes of three verbal presentations made to the staff on effective personnel policies.

b. A student in music history culminates a study of antique instruments and the music related to them by making a radio presentation. In it, he or she discusses the instruments and the music typically played upon them, and concludes by playing short selections on the instruments. A tape of the program is submitted as documentation of learning.

c. A student is enrolled in a field study program exploring careers in the helping professions. Others in the independent study group are interested in the area but are not directly involved in career exploration at this time. He or she submits the following:

    - A directory of helping profession careers for use by other students in the program.
    - A paper summarizing the impact of his or her field experience on personal, career and educational goals.

- A presentation at a seminar on careers in the helping professions.
- An individual learning plan to guide further exploration of careers in this area.

The documentation process, regardless of the specific form it takes, is designed to have the student look at and reflect upon the learning experiences in which he or she has engaged. Consequently, two objectives should be kept in mind: (1) that the student observe what happened and present an objective account of it and (2) that the student interpret, comment on, and evaluate what happened both in personal terms (what value it had for him or her) and in terms of its position in the larger educational context.

The documentation process also serves to validate the learning plan. The teacher and student can check to see if their original plan is proving useful along the way. They will be looking for instances where the actual learning experiences deviate from the original plan and trying to determine why. Alterations are not necessarily negative; they may simply indicate new directions which the learning has taken.

What the teacher and student learn about the plan will help them the next time they design a plan together and will provide the student with insights that are necessary to independent planning. Thus, feedback regarding the learning plan moves the student toward autonomy.

The process of documentation may also reveal that, although the learning plan is being followed now, modifications will be needed in the future based on student experiences at the site. By documenting what is going on and checking it against the original plan, the teacher and student may begin planning for some previously unexpected outcomes. Documentation, then, may help shape--perhaps even redirect--the learning plan.

HOW DOES THE TEACHER "SHARE" MONITORING WITH SITE RESOURCE PEOPLE?

The resource person is a key element in experience-based learning programs, and his or her value to the student's learning plan should be recognized and acknowledged. Ideally, the resource person is familiar with the program and its educational objectives, and functions more or less as an on-site faculty member. The resource person may even be in a position, or be of a particular personality, to facilitate the entire learning process--to manage it by planning and carrying it out, assessing the student's progress, and clarifying what happens at the site. In such a case, the teacher's task is to monitor progress in the more administrative sense of the word and to support the resource person to keep him or her involved in future placements.

At the other extreme, the resource person may not offer much supervision. Participation in the program may have been required by a superior; he or she may worry about its effect on productivity or confidentiality, and may have other more pressing demands.

There may also be problems on the student's side. He or she may not understand the limits to the resource person's input, may find the person incompatible, may not be putting much effort into the project, or may be behaving in ways that are difficult for the resource person to handle. If student problems arise, the teacher may need to provide encouragement to the resource person as well as to the student, to help in problem resolution, or perhaps even need to serve in a kind of counseling role with the two of them. If a particular person or site does not work out, it may be the teacher's job to discuss the problem and make the necessary changes.

In any case, it is crucial that a two-way communication be established and kept open between the teacher and the resource person. At the minimum, the teacher should provide him or her with information on several levels: an orientation to the institution and what it is trying to accomplish; information about the program and its goals; and information about the student's total program so that the resource person can see where the site experience fits in. The teacher must also work to keep the communication flow open so that the resource person can ask questions, make comments, and communicate problems or concerns along the way.

SUMMARY

The exact form of the monitoring process varies in terms of what is monitored, who is involved, and how frequent sessions are held with the students. Sessions with individual students, however, generally tend to follow a three-part format: first, debriefing, during which teacher and student review what has occurred; second, synthesizing, during which the teacher helps the student understand, interpret, and apply what has been learned; and finally, replanning, during which an overview or context for what comes next is established. Sometimes it is valuable to have a group session as well, to allow students the opportunity to share information and to reinforce each other.

The basic purpose of monitoring is to facilitate learning. The teacher does this by helping the student to develop communication skills, to apply valid general principles to other situations, to relate what is happening outside the classroom to the learning taking place in the classroom, and by involving the student in continual self-assessment of progress.

①

A SELF-INQUIRY ABOUT MONITORING

a. What kinds of monitoring do you do?

List and discuss their advantages and/or disadvantages.

What purpose do they serve?

b. Who decides on the kind of monitoring that takes place?

Do learners assist in this decision?

c. Do you use individual conferences for monitoring?

If not, why? If you do so, discuss the advantages to yourself and your students.

d. Critique your monitoring activities in terms of the text's presentation of the purposes of monitoring.

- Extending the learner's knowledge and skills;
- Removing problems and obstacles;
- Keeping records; and
- Maintaining effective liaison with community site personnel, if applicable.

e. Ask your own class to list several experiential monitoring procedures and discuss these together in terms of feasibility and learning potential.

②

HOW CAN A TEACHER HELP A STUDENT PROBLEM SOLVE?

ILLUSTRATION:

The following vignette illustrates two common student problems, lack of confidence partially created by inadequate planning and poor writing skills. In the exchange the teacher demonstrates a facilitative approach to these problems.

After reading the background material and vignette, see if you can identify the three elements of a monitoring session: debriefing, synthesizing, and replanning.

BACKGROUND: Dennis Harris is an English teacher who hopes to evoke in his students through the use of innovative teaching methods, something of his own passion and respect for language. He has arranged with the school administration to incorporate a semester of experiential community education into the structure of his English class. Mr. Harris has contacted key resource people in six different community service organizations which he feels have high potential as learning environments and has arranged to have teams of 4-6 students participate in the activities of each organization for the whole of the fall semester.

In the following interview, Mr. Harris is talking with Leanne Jackson, a member of a team working with a Chicano (Latino) legal aid agency. From its experience with the agency, the team is planning a community education package. All of the students on this particular project are also earning Spanish and sociology credits. Although there will be an oral presentation, the information will also be made available in print, so it is essential that the written material be carefully organized and presented attractively. Leanne has come to see Mr. Harris because she is having trouble with the material she has been contracted to write.

STUDENT PROFILE: Mr. Harris knows from previous classroom evaluations that Leanne is an enthusiastic participant in discussions, picks up ideas quickly, and is able to synthesize information and draw interesting conclusions from her own experience. The results of skills inventories, however, show that Leanne is severely handicapped with regard to written language skills. He also knows that she has many responsibilities at home and is virtually unable to find either time or proper conditions for after school study. Leanne has a record of poor grades and incompletes due to her difficulty in completing assignments.

MR. HARRIS: What are you working on, Leanne?

LEANNE: It's a pamphlet the team's putting out about the Center.

MR. HARRIS: Who's the pamphlet for?

LEANNE: Well, we haven't really decided yet. We thought maybe the students in high school around here, or maybe for anybody in the neighborhood who wanted to be informed about the Center. But the way things are going, I don't know if anyone's going to see this thing.

MR. HARRIS: Is the project boring?

LEANNE: You mean the pamphlet?

MR. HARRIS: No, I mean the Legal Aid Center itself.

LEANNE: Oh, the Center is fantastic. It's amazing how much goes on there everyday. I'm learning a lot.

MR. HARRIS: Then it's specifically the pamphlet that's troubling you?

LEANNE: Yes.

MR. HARRIS: What is it about the pamphlet that's boring?

LEANNE: Well, it's not really boring. It's just that I have a lot of ideas when I come from the Center or when I talk to people, but when I go to put them down, forget it! I can't think of a single idea!

MR. HARRIS: Does that usually happen to you when you have to write something?

LEANNE: Yes. That's one reason we decided in our team that I'd do a lot of the writing for the project--so I can learn how to do it. That was even my bright idea, but I'm beginning to regret it.

MR. HARRIS: You know, I really think you do have a lot of bright ideas. I don't think your problem is ideas so much as it is needing to learn the "nuts and bolts" of writing. It takes a lot of courage to push yourself to learn a skill like this, especially when the rest of your team is counting on you. I support you for doing it, Leanne, but I'm wondering if the situation isn't set up to be riskier than it needs to be.

LEANNE: What do you mean?

MR. HARRIS: The first thing that hits me is that the idea of the pamphlet is still so vague that it's bound to be hard for you to write it. I mean, the team hasn't decided yet who is going to read the pamphlet. And that has to be decided before any words can be put down at all, because that determines what you're going to stay, and how you're going to say it. See what I mean?

LEANNE: You mean, if it's going to be for the school, it would be different than if it was going to be for everyone in the neighborhood who was interested?

MR. HARRIS: Yes--for the students, you might want to concentrate on topics like drugs, rights in dealing with the police, civil rights of minors, and so on, while for the adults, you would include a whole array of services and information the Center offers. And to reach people in school, you would probably use a different vocabulary than for the adults. Right now, though, you're working in the dark. You don't know who you're writing this pamphlet for. It's as if you had to convince a group of people about something you believe in, but you had never met them before. You wouldn't know where to begin. It's no wonder you feel a little up in the air. So, what do you think you can do about it?

LEANNE: Well, I don't feel like making the decision myself.

MR. HARRIS: Good. It is a big decision, especially since this is the first action the team has taken to tell the community what it has learned at the Center. And one of the ideas behind working in teams is that you help each other. I think it would be good if you discussed it some more with the other members and came away with a collective decision.

LEANNE: I still think it's going to be hard for me. I'm just not a writer and I just can't plan out a whole pamphlet.

MR. HARRIS: Well, even if you know who your audience is, and you know the kind of language they respond to, you still have to decide what format to use. Part of that choice is determined by your time, energy and skills. Since this is new for you and you're having some problems, have you and the rest of the team thought of doing something shorter than a pamphlet to start out?

LEANNE: Like what?

MR. HARRIS: Oh, say, a leaflet informing your audience about the Center--in other words, one page of writing.

LEANNE: Sure would be a lot less pressure on me.

MR. HARRIS: I suggest you bring that up with the team. You'd get some practice on easier things and then, maybe, you can make the pamphlet your last and longest project of the quarter, after you have more experience and confidence. If you decide to do a leaflet, I can lay out some of the general do's and don'ts about leaflets and posters for you.

LEANNE: OK. Thanks!

Consider the following:

1. Which of the techniques for facilitative monitoring, of those mentioned in the test, did this teacher employ: questioning, honest feedback or directives?
2. What kinds of problem-solving went on in this monitoring session?
3. How did this exchange affect the learner's self-confidence?

③

HOW DOES A TEACHER MONITOR A PROJECT PLAN?

a. Assume that you are a teacher in the following situation:

- You have organized your social science curriculum to permit students to study, for part of the school year, certain topics that are of interest to them. The topics may be selected from a sample list or created by the student with your approval.
- Your intent concerning special topic study is to (1) help motivate students by involving them in the study area of their choice, and (2) give students the opportunity to be more independent and self-directed in their learning activities.

b. The outline below was completed by a student and submitted to you.

Student: Mike Smith
Area of Interest: The local school system and how it is governed

Major questions to answer:

1. How are decisions made?
2. How does the community affect decisions?
3. Do the schools represent community interests?

Possible resources:

1. District Superintendent
2. Visit School Board meeting

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FIRST MEETING: At the planning meeting between you and Mike, several actions were taken:

- You asked Mike to talk about his selected topic--describing in as much detail as possible his understanding of the topic; other questions that might be addressed; what he expected to learn; other possible sources of information concerning the project; and how they might be used.

- You completed a Project Plan outline together. Mike was able to talk about his interests and content preferences at some length and seemed to understand readily what was required in preparing a more detailed plan. Therefore, you decided to ask Mike to proceed with the learning activities, but to check back at the end of one week to report experiences, progress or problems.

c. SECOND MEETING: Mike reported the following:

- He had obtained copies of School District Board meeting proceedings for the past year, but had not yet tried to read them.

- He interviewed the District Superintendent about decision-making in the district and learned that how decisions are made changes with the issue or problem area.

- He had an appointment scheduled with the President of the Board of Trustees for the following week.

- He planned to attend a School Board meeting.

- He planned to contact the President of the local PTA for an interview.

- He planned to interview 2-3 members of the district teacher's association.

- He planned to interview the chairman of the district citizens' advisory group and meet with them over a four-meeting schedule.

d. From the list of "problem situations" given below, select at least two for discussion. Provide suggested teacher responses or actions for each selection.

1. After two or three weeks of effort (on a six week project), Mike loses interest in the project.
2. Mike shows strong reluctance to complete interviews.
3. Mike's summary of interviews held tends to dwell more on reporting frequency counts than on any effort to analyze the interview contact. The teacher does not know whether Mike attempted to ask in-depth questions.
4. Mike's final report does not demonstrate that he attained the objectives agreed upon.

④ HOW DOES A TEACHER MONITOR A FIELD PLACEMENT?

ILLUSTRATION:

The following vignette illustrates two important outcomes of the monitoring session. Through facilitative questioning techniques this teacher is able to help the learner communicate clearly the problem he is having with the field site. By assisting the learner to clarify his reactions, he is led to recognize and reflect upon some of his personal values and how they could influence his further career preparation and ultimate goal.

After reading the vignette, identify the elements of the monitoring session (debriefing, synthesizing and replanning) exhibited here as well as the facilitative techniques used.

BACKGROUND: David's first field placement at Experimental College was with a private architectural firm. For his second field placement, Mark found him a job with the local Redevelopment Agency. Although initially hired simply to do drafting and low-level map drawing, David was invited, because of his special interest and abilities, to work on the Victorian Renovation Project, a program to rehabilitate deteriorated Victorian houses in the downtown area. At first the job seemed ideal to David, because it gave him a chance to apply some of the aesthetic values he had acquired in the private firm within a public context. But as David became more involved with the project, he began to realize that there were other issues competing with pure aesthetics. What disturbed him most was that the renovated Victorians, while they enhanced the city visually and improved the downtown tax base, had become single-family homes for the middle class, rather than ameliorating the already desperate housing situation among central-city, low-income families. In one of his regular meetings with Mark, David brings up this issue.

Helping student articulate problems: What problems have emerged from David's field placement? How would you help him break those problems down into issues that are central to his profession?

MARK: What exactly is disturbing you about this situation?

DAVID: Well, it just seems that this project isn't doing anything for low-income families. They can't afford to buy the Victorians once we've renovated them.

MARK: Would you rather tear down the Victorians and use that space for public housing?

DAVID: No, I'd hate to see those beautiful houses torn down--the whole side of me that's interested in architecture couldn't stand that. Also, there are a lot of problems with public housing--it's usually so ugly that people don't care to keep it up, and so impersonal that they can't get any sense of neighborhood. But it does seem a waste of space to use that much land for just one family.

MARK: So there are two valid claims arguing against each other--the aesthetic issue and the social issue.

Expanding student's view of the implications of his career choice: How would you use David's specific experience in this field placement to help him make some overall generalizations about architecture?

DAVID: Yes. I never thought architecture was this complicated when I was working in the private firm.

MARK: Can you explain how your ideas have changed?

DAVID: Well, until now I've thought of architecture mainly as a craft--like building, but on a higher level. And working at the private firm confirmed that idea. I was learning a lot of technical skills and thinking about design issues, and I began to think of architecture as something that just involved me, the land I was building on, and the client I was working for. But this job has brought in a lot of new issues.

MARK: For example?

DAVID: Whether people have a right to housing, and how much space each person deserves.

MARK: You mean that architects have to work with social and economic factors as well as technical ones.

DAVID: But it seems the private firms don't have to worry about things like that.

MARK: True, they probably don't, at least not as much. Would you rather not have to worry about those things?

Focusing student's career objectives: What is the range of job possibilities for this student within the field of architecture? Given David's response to his two field placements, what career directions would you encourage him to take? How would this alter his proposed program of study?

DAVID: No, it would be impossible for me to ignore them at this point--I already know too much about what happens in a city.

MARK: So you may not be satisfied with being a private architect working exclusively with private clients. You'd probably be interested in working with a firm that did a lot of public work, or else in being an architect within a public agency. And then there's always city planning--have you thought about that?

DAVID: I've been thinking about that recently, and I thought maybe I could take a couple of courses--I noticed a few in one of the catalogues. How do you become a city planner?

MARK: Usually it's a graduate degree--you could finish you B.A. in architecture here and then go on to the university for a Masters in City Planning. It seems to me that at this point you should definitely leave that option open. And next term you can do some independent reading in city planning--you and I can put together a list and meet regularly to talk about what you read. And also, I can put you in touch with a planner who's an adjunct faculty member with the College.

HOW DOES A TEACHER DEAL WITH A STUDENT'S PERSONAL PROBLEMS? ⑤

a. Use the examples below or substitute others of interest and determine what you feel are appropriate responses to students' personal problems.

1. A secondary student says the reason for her missing appointments at the site and for not completing assignments is that she is so miserable at home that she is considering running away. She says she may drop out of the program if she does not get help. Her facilitator has observed that she seems very tired and unkempt, and occasionally appears for sessions with visible bruises.

2. A male college student asks for advice on whether or not to get married. His facilitator knows the intended spouse and has the definite opinion that it would be a mistake for both of them.

3. A college student, a mother in her late forties, asks for advice on where to send her child to school.

b. Consider the following:

- What, if anything, is wrong with personal involvement on the part of a faculty member?

- Given a conviction about either position, are there acceptable points in-between?

⑥ HOW DOES A TEACHER HANDLE A PROBLEM WITH A RESOURCE PERSON?

ILLUSTRATION:

The following dialogue between teacher and student presents a student's perception of a resource person's behavior. Four alternative strategies for problem-solving with this student are outlined below. Select the strategy which most closely approximates what you feel is appropriate facilitative behavior.

BACKGROUND: Sonia is a seventeen-year-old secondary school senior student who is doing an individual project to receive credit in Career Development and Economics. The project includes on-site activities four hours a week at Bennigson Bakery where Mr. Rose, the company controller, serves as a voluntary mentor. Sonia's objectives are to learn about careers in business management and about techniques of financial planning and control.

Bennigson has served as a learning site for the high school program for a few years. Mr. Rose's past encounters with students appear to have been mutually satisfactory. Female as well as other male students have worked with him in past years, all with satisfactory results.

The teacher and Sonia had previously agreed that they would meet for a conference after she had made two visits to Bennigson. The purpose is for Sonia to review how things are going and whether or not her objectives are being served, and to report any problems that may need attention. At this meeting, Sonia has given a brief summary of what she has been doing at Bennigson.

TEACHER: It sounds as though they're keeping you pretty busy.

SONIA: Yes, but on trivia.

TEACHER: You think so?

SONIA: I know so. Spending an hour filing delivery receipts doesn't tell me anything about jobs I'm interested in, and it certainly doesn't tell me anything about the financial operation. Mr. Rose agreed two weeks ago to give me a chance to learn something about accounting and financial planning.

TEACHER: He'll probably make good on that. It's a little early to tell, don't you think?

SONIA: It's not too early to tell how he feels about women in business.

TEACHER: How so?

SONIA: One, I learned from Nick and Andre that Mr. Rose let them in the computer room the first day and they were analyzing computer print-outs and even doing a little programming by the third week. Office filing was never even mentioned to them the whole time they were there.

Two, I haven't seen a woman doing anything important at Bennigson. Just routine office stuff. All the bosses and technical people are men.

Three, when I reviewed my plans with Mr. Rose the first day, he had a lot to say about office procedures but was very evasive about financial planning and control.

Four, when he introduced me to people in the office, he called me "this charming little lady."

STRATEGY 1: Offer to call Mr. Rose to tell him of Sonia's dissatisfaction and to obtain his commitment to allow Sonia to complete her project as originally planned.

LIKELY EFFECTS

1. A lost opportunity for Sonia to deal with her own problem.
2. A tense relationship between Sonia and Mr. Rose.
3. A resentful resource person and possibly his loss from the program's resource pool.

However, it should be noted that Sonia may be reluctant to deal with the problem herself and, all things considered, it may be advisable for the teacher to make direct contact with Mr. Rose. If so, the teacher should try very hard in conversations with Mr. Rose to avoid: (a) putting him in a position in which he must defend his attitudes and behavior, and (b) revealing to Mr. Rose that Sonia is upset and has complained to the teacher about him. The teacher might call or visit Mr. Rose ostensibly to review how things are going, to thank him for his past and continuing contributions to the program, and to learn if Mr. Rose has encountered any problems with the student that need the teacher's attention. In the course of the conversation, the teacher could insert some supportive statements about Sonia's high motivation and potential and her enthusiasm for the inside of corporate management. The intent would be to maneuver Mr. Rose into affirming: (a) his intention to introduce Sonia to financial management and (b) his awareness of Sonia's qualifications for that kind of experience.

STRATEGY 2: Encourage Sonia to take positive steps to resist Mr. Rose's prejudicial behavior and to influence him into full cooperation with the project as originally planned.

LIKELY EFFECTS

1. An opportunity for Sonia to take responsibility for solving a problem.

2. An opportunity for Sonia to solve a problem, including clarification and verification of the real problem and formulation of possible ways of dealing with it, i.e., solving it or neutralizing it.

3. An opportunity for Sonia to exercise her own skills in interacting with another person in a situation requiring cooperation, but containing possible conflict.

4. An opportunity for Sonia to experience and take responsibility for the consequences of her own decisions and actions.

STRATEGY 3: Explore with Sonia the possiblity of adopting a new, additional topic of inquiry at Bennigson: namely, personnel practices, with special emphasis on sex equity in hiring and promotion.

LIKELY EFFECTS

1. A strongly motivated student.
2. An opportunity to test a hypothesis she has formulated about Mr. Rose's and Bennigson's attitudes and practices--with all the attendant benefits of learning when and how to suspend judgment, maintain objectivity, search for and use evidence, and arrive at a "warranted assertion."
3. An opportunity for Sonia to discover that learning opportunities are everywhere and do not necessarily have to be preplanned.

⑦ HOW DOES A TEACHER HELP A STUDENT INTEGRATE LEARNING?

ILLUSTRATION:

The following background and possible problem situations with a student are offered as a basis for discussing teacher strategies for extending the learning--helping the student make functional linkages between theory and practice.

After reading the background information, describe a potential "problem situation" which will require the teacher to help the student integrate the learning taking place.

BACKGROUND: A female student has the career objective of working in a child care center. Her learning contract includes a general psychology course, an independent study regarding handicapped children, and a 15 hours/week internship at a day care center. At the time of this interview she has been involved in all three components for four weeks. She has met with the teacher once during this period. The purpose of that first session was to ensure that all activities had been started smoothly and still seemed appropriate, and to establish the use of the ongoing monitoring devices --a journal and individual sessions. This second session is to be focused on facilitation of learning--helping the student in making connections, generalizing, integrating, etc.

Consider the following situations--or other possible situations--and suggest some monitoring strategies to use, that is some questions to ask at this second session.

a. Suppose the student complains that she is "not learning anything" in the experiential portion; she does not see any connection between the theories in a general psychology course and her activities at the day care center.

b. Suppose the student says she is overwhelmed with the amount of work she has to do.

c. The closing minutes of a session are very important. Regardless of what problem has been addressed, what would you be sure to include in these closing minutes?

HOW DOES A TEACHER DETERMINE MONITORING PROCEDURES FOR AN EXPERIENCE-BASED COURSE? ⑧

a. Assume you are a teacher in the following situation:

You want to teach a course for 25 students in physical science using experiential education procedures. The principal or department head has approved the course contingent on the capability of the teacher to manage it. In a meeting between the teacher and administrator, several questions were asked of the teacher, including the following:

1. How will you monitor attendance if students are off-campus part of the time?
2. What will be the time requirements for each student in the course?

b. Prepare responses to these two questions. Compare your answers with the sample responses below.

SAMPLE RESPONSES:

1. Monitoring Attendance: Students could be asked to plan their activities each week on a Weekly Activity Schedule, and to update it if scheduled activities change or are cancelled. The schedule should specify the nature of the activity, location, time and community contact person and phone number. At the end of each week, a Student Activity Report could be submitted by each student listing resources visited, types of activities, and amount of time spent in each. The teacher should review this to confirm the student's fulfillment of commitments. In addition, community contact persons could be asked to "log-in" the student's arrival and departure times and the nature of the visit.
2. Student Time Requirements: The total number of hours required by a course (both in and out of the classroom) should be specified before the course begins. A Master Schedule should be prepared which indicates regular classroom meetings students should be attending, and care should be taken to avoid conflicts in scheduling. Students should be informed of the minimum amount of time they have available for off-campus activities and be given the responsibility for scheduling them.

⑨

SELF-ASSESSMENT

a. Try to list or describe specific things you have learned about monitoring as a result of these activities. These may be new skills, broadened understandings, ideas you want to experiment with, etc. How do you feel about what you have learned?

b. Specify areas of competence for which additional learning activities are needed. Describe one or more ways to meet this specified need.

MEDIA

In Additon to the Classroom, Far West Laboratory, 1855 Folsom Street, San Francisco, CA 94103, 1979.

Two 18-minute color videotapes showing the role of teachers in different secondary and post-secondary programs using experience-based techniques. Highlights of individual monitoring sessions with students in experience-based programs are used to illustrate the teacher's role in debriefing and problem-solving with students. Part II demonstrates the importance of the student's journal both in problem identification and in integration of theory and practice.

SELECTED ANNOTATED BIBLIOGRAPHY

This bibliography represents a variety of materials: some scholarly, others "popular;" some theoretical, others practical; and some lengthy, while others are brief. It is hoped that the annotations are sufficiently detailed to show how the reader might profitably sample its offerings.

Argyris, Chris and Schon, Donald A. Theory in Practice: Increasing Professional Effectiveness. San Francisco: Jossey-Bass, 1978. xvi, 224pp.

> Though not directed only to the educator, Theory in Practice will help educators become more self-aware, more aware of others, and hence more effective.
>
> The authors distinguish espoused theories, which are used to justify and describe behavior, from theories-in-use, which are the operant theories of action. They examine how espoused theories and theories-in-use influence both personal and professional effectiveness and discuss strategies and environments for learning how to change.

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*Some of the items in the bibliography were taken from Experiential Learning: An Annotated Literature Guide, 1978 supplement. Council for the Advancement of Experiential Learning (CAEL). American City Building, Suite 212, Columbia, MD 21044. Those items are identified with the acronym (CAEL).

Baines, Tyrone R. "The Faculty Supervisor" in Duley, John, ed. Implementing Field Experience Education. San Francisco: Jossey-Bass, 1974. Pp. 39-44.

> To understand the faculty supervisor's role, Baines first examines three models for field experiences. He concludes that though structures and forms may vary, all three have one purpose, to promote learning. As the university's representative, the faculty supervisor must ensure that the field experience does promote learning and that the student has access to it.
>
> The faculty supervisor and the program administrator, Baines contends, have different functions requiring different skills and should be, therefore, different people. However, one person frequently does both jobs, and Baines goes on to discuss six functions such a person will perform.

DeCecco, John P. The Psychology of Learning and Instruction: Educational Psychology. Englewood Cliffs, NJ: Prentice-Hall, 1968. xvi, 800pp.

> DeCecco has prepared a college textbook for prospective teachers which is intended, among other things, to provide fairly specific guidelines for analyzing entering behavior of students, stating instructional objectives, providing the necessary conditions for various types of learning, and constructing tests and interpreting test scores. Thus, this text pertains to our units on planning, monitoring, and assessing.
>
> It is organized into sections on instructional models and objectives, entering behavior, instructional procedures, educational innovations, and performance assessment and research. A bibliography and an index complete the book.

Gordon, Thomas. T.E.T.--Teacher Effectiveness Training. New York: Peter H. Wyden, 1974. xviii, 366pp.

> Gordon, a clinical psychologist, author of the popular P.E.T.--Parent Effectiveness Training, and founder of a nation-wide system of parent effectiveness training programs, turns his attention to teachers. He examines defective teacher-student relationships, and discusses numerous other aspects of schooling, including how to communicate with students, how to listen to them, how to handle their problems, how to modify the classroom environment to prevent problems, how to handle conflict in the classroom, how to make the school a better place to teach in, and how to handle parents. An annotated bibliography and index complete the book.

Nesbitt, Hadley. College-Sponsored Experiential Learning--A CAEL Student Guide. CAEL, American City Bldg., Suite 403, Columbia, MD 21044, 1977. iv, 82pp.

> CAEL report #6 is the companion volume to Duley and Gordon, CAEL #5, and it is designed to help students make the most of experiential learning. Eleven basic steps form the organizational core of the book: taking stock of educational goals, considering the placement options available, defining principle tasks and duties, describing specific learning objectives, identifying basic preparation, devising a learning plan, or your learning outcomes, and establishing new learning objectives.
>
> Charts, checklists and worksheets aid the student at each step. Reference is made to three recent and important books on life-planning.

Rogers, Carl R. On Becoming a Person: A Therapist's View of Psycho-Therapy. Boston: Houghton Mifflin Sentry Edition, 1961. x, 420pp.

> The 21 papers in this volume are selected from the author's books and articles written between 1951 and 1961. They are intended for the intelligent layperson as well as the professional. Each paper is prefaced by the author's remarks, establishing its context. Together, the papers have been organized to portray a unified and developing theme, moving from the highly personal to the larger social significance.
>
> Of special interest in Part IV, "What Are the Implications for Living?" are: Chapter 13, "Personal Thoughts on Teaching and Learning;" Chapter 14, "Significant Learning: In Therapy and Education;" and Chapter 15, "Student-Oriented Teaching as Experienced by a Participant." Those interested in pursuing Rogers' ideas further will find the chronological bibliography of his works, 1930-1960, most helpful.

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BOOK IV

Evaluating Student Progress

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ACKNOWLEDGMENTS

PREFACE

This Book, Evaluating Student Progress, is part of a set of staff development materials consisting of four Books, a training Coordinator's Handbook and two 18-minute videotapes titled In Addition to the Classroom. The materials are designed for use in either pre-service or in-service staff development programs.

ABOUT THE MATERIALS

Contents

The four books in the staff development series are: Book I--Overview to Experience-Based Learning and the Facilitative Role of the Teacher, Book II--Planning with Students, Book III--Monitoring Student Progress, and Book IV--Evaluating Student Progress. Together, they present ways to improve the training process in secondary and post-secondary instructional programs and courses, dealing specifically with why and how experiential learning activities might be integrated into instructional programs or courses and how the teacher's role might be modified accordingly. Each book is comprised of reading material that introduces concepts about and procedures for experience-based training and corresponding teacher functions, guided activities to allow further exploration by trainees, and an annotated bibliography of selected source material to further stimulate the reader.

The videotapes, In Addition to the Classroom, Part I and II, describe three types of experience-based programs or activities: secondary career exploration, post-secondary internship, and a classroom-based activity. These sample programs outline some of the general characteristics of experience-based learning and illustrate the facilitative teacher functions of planning, monitoring, and evaluating.

Rationale

The materials reflect a commitment to three general assumptions about about the learning process:

- Learners should be moving toward increased responsibility for planning, decision-making, carrying out instructional decisions, and evaluating their own education. Doing so capitalizes on students' interests as well as on their potential to be self-directed in learning.
- Students vary in the ways in which learning is most efficient and effective and should have alternative learning activities and resources from which to select.
- Going beyond symbolic learning methods (reading, hearing and talking about phenomena) to include experience-based techniques (role-playing, simulations, and practice in real contexts, such as the community) enhances the quality of education.

The materials are designed to help teachers create instructional programs or courses that are consistent with these three assumptions.

Audience

Teachers who are working or anticipate working in secondary or post-secondary institutions are the intended audience. Since the materials are introductory, they will be particularly useful to both those training to become teachers and experienced teachers who are yet unfamiliar with experiential techniques (classroom or community-based). Furthermore, the materials are not directed at any one subject area, discipline, or course. Whether trainees plan to teach mathematics, history, English, psychology, chemistry, woodshop, or fire-prevention, experience-based techniques are applicable and these materials can be used or adapted.

Intended Benefits for Trainees

The materials are intended to provide trainees with:

- An introductory knowledge about experience-based learning;
- An introductory knowledge about the teacher's role as a facilitator;
- Opportunities to practice and develop skills and perspectives concerning the design and use of experience-based learning activities; and
- Opportunities to practice and develop skills and perspectives concerning certain role functions such as planning, monitoring, and evaluating student progress.

How Materials Can Be Used

Individual trainees can use the books by simply omitting all activities requiring group interaction. However, an effective method is to form a voluntary group and have a training coordinator available to schedule, make arrangements, assist participants to reflect on experiences, lead discussions, and to help assess individual progress. Group interaction is believed to be extremely important to the learning enterprise.

The books may be used selectively in a workshop of several days duration or in a course extending over several weeks. The latter arrangement is recommended, since the extended period permits participants to engage in outside-of-class or off-campus activities and allows time for the participants to reflect on experiences and, when appropriate, to practice or apply skills.

Trainees should also keep a notebook or journal recording their activities, ideas, and reactions during training. Such a record may be a useful tool for later reference when working with students or orienting other educators to experiential learning procedures.

In Addition to the Classroom is designed to orient trainees to experience-based learning as well as to serve as a stimulant for discussion concerning teacher functions.

INTRODUCTION

Everyone evaluates. We evaluate the probable worth or merit of doing something versus the probable consequence of not doing it. And we evaluate the worth or merit of these events after their completion. In education the evaluation process seeks to learn how well a student did on an assignment or to determine whether there were any differences between intended outcomes (objectives) and actual outcomes (performance). Teachers may also be interested in unspecified learner outcomes--those not listed as intended outcomes. In addition, teachers and others may be interested in whether the educational program itself (learning activities, resources) is doing what it is supposed to do. In the latter instance, it is the program's effectiveness in contributing to intended outcomes that may become an important question. Based on program evaluation, decisions can be made about how well the school or its components are functioning, what instructional methods and materials are satisfactory, and where changes are needed. In Book IV the focus is on student evaluation.

Student evaluation may serve two very different functions: (1) it can be used to satisfy institutional requirements and (2) it can be the basis for providing feedback to the student about his or her progress. The process usually involves both the determination of what "evaluative" information to collect and its collection. This information is to be used in making decisions about:

- Student achievement: the amount of progress made by a student either toward desired goals or as an unintended by-product of the learning experience.
- Student certification: awarding credit, credentials, or certificates on the basis of what the student has accomplished.

Evaluation has always had a definitional problem. Basic terms such as assessment, measurement, and evaluation are often used interchangeably, depending on the backgrounds and purposes of the users of the terms. For purposes of these materials, evaluation is defined rather broadly and includes activities often referred to as assessment (judgments about what and how to measure as well as the measurement process itself) and activities concerned with making judgment about the worth or "value" of the products of learning. The material is organized around such topics as (1) how experience-based education affects the evaluation process, (2) establishing performance criteria, and (3) selecting information gathering techniques, organizing the information, and making judgments about the products of learning.

HOW DOES THE USE OF EXPERIENTIAL EDUCATION AFFECT EVALUATION?

One of the advantages of using experiential education procedures is that a wider array of learning opportunities and outcomes are possible for the teacher and learner to consider, thus more individualized learning plans usually result. This wider array of learning outcomes produces, in turn, a need to broaden the assessment procedures.

In an experience-based program there is usually greater diversity of student activities than in programs in which didactic procedures are primarily used; students are often working toward different goals in different settings. Under these circumstances the more conventional assessment methods, such as quizzes, course examinations, or standardized tests, which assume that all students are learning the same things at the same point in time, are often inappropriate. The range of assessment techniques needs to be expanded to address the greater range of learning to be found in experiential education.

There are a number of specific characteristics of experience-based learning that affect student assessment. For example:

- Experiential education is highly individualized and often quite diverse.
- The amount of supervision of experiential learning activities varies. The activities may have been largely unsupervised; they may have been supervised under noninstitutional auspices and personnel; or they may have been closely planned and monitored, but under quite different circumstances than most classroom learning situations.
- Experiential learning tends to place more responsibility on the student for clarifying learning objectives as well as for pursuing those objectives.

- Experiential learning tends to emphasize application of knowledge. Its demonstration, therefore, is apt to require appropriate evidence of capability, performance, or a satisfactory learning product.[1]
- Experiential learning is often a matter of discovering the "fit" between what the authors of books say about a field of activity and what the learner discovers as a participant-observer during an experience. The consolidation of learning, then, is frequently a matter of integrating theory and reality.

Of course, these characteristics differ somewhat in their applicability to experiential education, but on the whole they emphasize the need for individual assessment using methods that measure demonstrable competencies.

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[1] Warren Willingham, Principles of Good Practice in Assessing Experiential Learning. (CAEL, Lakefront North, Suite 300, Columbia, MD 21044, 1977).

HOW CAN THE ASSESSMENT PROCESS ENHANCE LEARNING?

Concern about evaluation issues begins during planning, with the establishment of performance standards that represent the objectives, and continues during the monitoring process. Aspects of monitoring are part of the evaluation process because a rich source of information concerning individual learner progress and opportunities for building on what is being learned becomes available at that time. Furthermore, when monitoring data are made available to students, the involvement of students with learning activities tends to remain at a high level. Feedback should be both prompt and specific to the learner's objectives and to his or her performance.

During monitoring, the teacher and student have frequent opportunities to identify problems or unforeseen needs for which program changes may be indicated. But applying specific remedial action to diagnosed problems is not a routine task. Under the best of circumstances, one is never entirely certain as to the correctness of selected remedial procedures. Assessing the situation from information collected from the learner about problems and possible solutions is one way of minimizing the risks of inadequate or incorrect changes.

Another important reason for collecting information during the monitoring process is to help ensure transfer of learning. Transfer is more likely to occur when (1) the learner's attention is focused on the importance of being able to develop skills that are useful in various situations, (2) opportunity for practice is made available, and (3) the learner is helped to recognize the similarity of skill requirements among various problem situations. Collecting information about student progress to facilitate these three tasks is critical to their success. Such information collection can never be completely preplanned since useful information comes about as a result of interactions between teacher and student.

At different points in the learning process, comprehensive assessments are usually needed. These may occur at the end of a course, a semester, or a year's work. It is a summing up for the purpose of assigning a grade, determing credits signifying the learner's accomplishments, reporting to others on progress, or completing official manuscripts or documents. But the most important use is for the learner. Such assessments can provide the student motivation, guidance for future planning, and a status report--a "bench-mark" by which general progress can be seen.

WHAT ARE THE GUIDELINES FOR INDIVIDUAL ASSESSMENT?

There are numerous ways to assess learning and, when using experiential procedures, the options increase substantially. Because a wide range of learning is often pursued, a broad spectrum of assessment procedures is needed. The following general guidelines can be used to assist a teacher in thinking about assessment and selecting particular methods for learners in an experience-based program.

a. Use criterion-referenced measures. Criterion-referenced assessment involves measuring learner performance with standards based on reasonable expectations for that particular student or on externally established proficiency levels, e.g., typing 60 w.p.m. Norm-based assessment involves comparing a student's performance in certain learning areas with the performance of other students. Norm-based assessment is most appropriate when the skill area is universally taught (reading, math). But norm-based assessment seldom provides much information that is useful in diagnosing or working on learning problems with individual students. Both types (criterion and group norms) can be useful, but in individualized programs the former is normally emphasized, particularly when student objectives are individually set and assessment outcomes are used to provide guidance to students about their progress.

b. Learner participation in assessment. The learner should participate in the selection of the assessment methods. This helps maintain learner involvement and interest in the learning activities.

c. Mutual agreement on expectations and credit awards. Some institutional policies regarding credit for experiential learning are usually necessary. In some cases, staff committees review plans, assessments, and credit awards. In others, the teacher and student are the primary decision-makers. Regardless of the procedures involved, learners should either participate in the process or be kept informed about the policies and procedures that will affect them.

d. Match measures to expected performance. This means that competencies to be developed or improved (writing, speaking, typing, selling, building, etc.) be assessed by a demonstration of the specific competency called for. In other words, assessment methods should be as direct as possible. For example, if the competency calls for a repair of a transmission on a V-8 engine, use of such an engine in assessment is preferable to a written test unless the competency in question has to do with writing about V-8 engines.

e. Choose multiple measures for obtaining information. Multiple types of measures are usually preferred. As learning activities vary, so will measures. Obtaining multiple assessments of a single performance usually increases the reliability of the assessment and the teacher's confidence in judging the worth of the performance, as well as an improved understanding of the learner's competency.

f. Use multiple assessors. Make use of more than one judge of effectiveness. A single assessor can make a number of kinds of errors in judging behavior performances and knowledge. For example, an assessor can evaluate a learner according to personally held stereotypes or attitudes, judge on impressions rather than solely on observed performance, or allow an outstanding or inferior trait to influence the rating of other traits. Using more than one rater tends to reduce the likelihood of such problems.

g. Match measures to learner characteristics. When possible, select techniques that are appropriate to the background and characteristics of the learner. Permit the learner to display or reveal competencies from strengths--not weaknessses. Speech handicaps, writing difficulties, etc. are obvious examples of conditions affecting selection of techniques. Of course, there are situations in which the specific competency will dictate the performance mode, e.g., surgery and electrical wiring.

h. Select measures with educational benefits. Where possible, select methods which provide learning opportunities to the student as a result of the performance itself. Such benefits to the learner come from practice, seeing oneself perform or follow-up discussion and feedback. Some techniques provide more information for direct feedback to the learner than do others. The value of discussing assessment outcomes with students has long been established. Such discussions are, perhaps, the most effective way known to enhance the likelihood of the learner's profiting from the performance and being interested in further planning.

i. Provide documentation. Record keeping is necessary to document the learning process in any educational program. Because teachers in experience-based programs are trying to be responsive to changing learning situations, a record of events, reactions, progress, modifications, new directions, etc. should be kept to aid in replanning and in judging how well the learner is progressing. When selecting assessment techniques consider how documentation can be accomplished.

j. Acknowledging institutional requirements. Very often institutions or governing boards have certain requirements for information concerning student progress and achievement. While such information requirements may be based on values about learning and evaluation that are dissimilar to your own, a selection of techniques will have to acknowledge these requirements. For example, schools may be required legally to administer standardized tests to secondary level students and report results to a state education agency. An evaluation requirement of an externally funded project may include administration of specified tests or scales.

In general, then, assessment methods should be selected to ensure that the information to be collected is: (1) appropriate to the learning objectives as well as the character of the learning, (2) adequate to make accurate and impartial judgments, (3) beneficial to the learning process, and (4) reflective of the institutional requirements for documentation. In so doing, the time and energy spent on assessment activities will be more likely to result in a satisfactory student evaluation.

HOW ARE PERFORMANCE STANDARDS ESTABLISHED?

Having competence means that a person possesses the capability to perform successfully an act, such as playing the piano, or to accomplish a task, such as building a house or computing correlation coefficients. How competence is defined will determine the kinds of attributes a person must possess in order to be referred to as "competent." One way of defining a competence is that a person's observable performance relies on the following:

> Knowledge--a set of usable information organized around a specific content area, e.g., knowledge of mathematics;
>
> Skill--the ability to demonstrate a set of related behaviors or processes, e.g., logical thinking;
>
> Trait--a disposition or characteristic way of responding to an equivalent set of stimuli, e.g., initiative;
>
> Self-schema--a person's image of himself or herself and his or her evaluation of that image, e.g., self-image as a philosopher; and
>
> Motive--a recurrent concern for a goal state or condition which drives, selects, and directs behavior of the individual.[2]

Competences are often defined by a consensus of experts who make judgments about what represents a "competent" performance, or by a job analysis that identifies the information, skills, and other characteristics necessary for "competent" performance.[3] Obviously, how competence is defined--how it is represented in behavior--has considerable impact on techniques used to measure the competence. When undue attention is paid to expert consensus, there is the risk of a lack of objectivity resulting from biased perceptions and value systems. When too much emphasis is placed on job and task analyses, there is a risk of "overkill" in identifying "microskills" that may not add up to or represent the totality of the competence.

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[2] George O. Klemp, "Identifying, Measuring, and Integrating Competence," In Defining and Measuring Competence: New Directions for Experiential Learning, No. 3 (San Francisco: Jossey-Bass, Inc., 1979).

[3] S.S. Pottinger, "Competency Assessment: Comments on Current Practices," in Defining and Measuring Competence: New Directions for Experiential Learning, No. 3 (San Francisco: Jossey-Bass, Inc., 1979).

Regardless of the means by which the competence is defined, its definition is normally a statement of behavior for which certain knowledge and skills are necessary for the behavior to occur. There should be a certain amount of fidelity between the desired competence and the expected performance. Establishing the degree of expertise or the extent of the knowledge or skills to be acquired by the learner calls for setting standards. Standards are often described as minimal for purposes of passing or receiving academic or educational credit. Minimal standards may, of course, vary depending on the importance of the competence. For example, standards for receiving biology credit toward a medical degree may be higher than for an undergraduate course leading toward a liberal arts degree.

The setting of standards is often affected by pressures from the society at large to "upgrade" the meaning and worth of a diploma, or from members of a profession who wish to "control" admission into an occupational or professional area. A major consideration is that higher scores on certain test items do not always guarantee better performance or more competent behavior in the area of concern. The reason for this is that approaches to testing or measurement often fail to take into account complex sets of behaviors or certain critical aspects of behavior.

When setting standards, the following guidelines are proposed:

- They should be arrived at via legitimate means. Acknowledged and representative spokespersons should be a part of the process of setting the standards. They should not be arbitrarily set to achieve other purposes.
- Standards should be reasonable. They represent performance levels that are attainable by those who are required to try to reach them, e.g., a standard for promotion in public schools.
- They must be consistent with the possibilites of reaching them, given the instructional program. That is, the content and standards used during the teaching/learning process should provide a clear basis for attaining the required standards.
- They should clearly state how well and under what conditions the performance is to be measured.
- They will usually represent what is seen as minimally necessary for effective performance in tasks that are commonly called for within specific job or professional level contexts. Minimal competence, therefore, implies standards that are flexible--standards that depend on the situation. For example, standards of performance for auto mechanics may be different from those for airplane mechanics where the consequences of less than minimal performance can have serious effects.
- Standards must be public, i.e., anyone who is to be affected by their being met or not met should be completely informed.

WHAT KINDS OF METHODS ARE USEFUL?

The evaluation process is one in which teachers and others make use of information (quantitative and qualitative evidence) to arrive at value judgments about the students' progress. Since values vary rather widely among people, the kinds of information considered will also vary widely. Therefore the selection of techniques by which information is selected should be done carefully.

Experiential education offers a unique opportunity for the development and use of alternative measurement methods. In many classrooms assessment of learning tends to rely on written tasks. Experiential education, however, because it involves the development of a wide range of skills, can include not only the more traditional objective and essay examinations, but also measures of behavioral performance. Two particular advantages of being able to use an expanded array of measurement methods are: (1) direct comparison of learning with learning objectives, so that it can be decided whether or not the expected learning has taken place, and (2) more than one sample of learning can be obtained so that reliability of judgments regarding learning can be improved.

It is the nature of experiential education that students learn "by doing." Therefore, it is the function of individual assessment to assess what a student's performance is in addition to his/her knowledge. Table 1 provides brief descriptions of a number of methods that may be useful in assessing students' performances. Each method is described in terms of some possible response modes, some general characteristics of the method, and the outcomes that can be measured using that method. In most cases the teacher is the assessor. In a few cases, other observers are desirable or "expert" judges (as in the work sample method) are needed. Regardless of who actually assesses, the learner should be involved in a debriefing or discussion of the assessed outcomes.

TABLE 1: REPRESENTATIVE METHODS FOR ASSESSING EXPERIENTIAL EDUCATION

TYPE	RESPONSE MODES	GENERAL CHARACTERISTICS	OUTCOMES MEASURED
1. WRITTEN			
Objective Tests	• true/false • completion • multiple choice • matching • short answer	• permits extensive sampling of content • lends itself to guessing • requires considerable time and expertise to construct • easy to use and score • standardized or teacher-made • may be unrelated to real life tasks and activities	• knowledge of facts and procedures • can be used to assess ability to discriminate, categorize, reason, such as in interpretative exercises (tables, graphs, maps) • aptitudes • interests
Essay Tests	• extended discussion of a set topic in continuous prose	• integration of argument and evidence • difficult to assess • allows student to structure answer individually	• organization of ideas • writing skills • depth of understanding
Case Study or Reports	• a written statement, highly detailed and complete, of a problem, including definition, analysis, relevant information, conclusion, etc.	• opportunity for learner to demonstrate and teacher to assess complex learnings • difficult to evaluate • often a "final" test of mastery of content and process skills • learner able to structure response • forces learner to make value judgments	• ability to proceed through a problem-solving sequence • writing and organization skills

TABLE 1 (page 2)

TYPE	RESPONSE MODES	GENERAL CHARACTERISTICS	OUTCOMES MEASURED
2. PERFORMANCE Work Sample	• learner performs task(s) in realistic setting	• observation by evaluators of a task or series of tasks performed by learner • work sample can be designed to be very simple or very complex • aspects of a real task are reproduced • checklist or rating scale is used by evaluators	• provides a measure of what learner can do, how knowledge and skills are applied • assesses flexibility, problem-solving ability, ingenuity, etc. • self-confidence under pressure
Role-Play	• two or more learners interact in assigned roles and tasks	• may combine interview, discussions, group problem-solving, defending a position, information gathering, etc. • circumstances for role-playing tasks may be designed to be adverse or facilitative • people vary widely in their ability to perform • realism is often difficult to achieve • learner must be comfortable with this response mode	• interpersonal skills • ability to communicate, think, etc., under pressure • empathetic understanding • dramatic skills: getting "inside" a character, "stage presence", making a desired impact on an audience
Simulation	• problem-solving, decision-making, and setting priorities	• simulates a role or situation in which learner is faced with a "typical" set of problems, issues, etc., and must "handle" in specified time period • appropriate for assessing complex skills related to making decisions • difficult to design and evaluate	• understanding of scope of problem • ability to set priorities, make decisions, take action

TABLE 1 (page 3)

TYPE	RESPONSE MODES	GENERAL CHARACTERISTICS	OUTCOMES MEASURED
Products	• constructing, designing, painting, composing, etc.	• opportunity for learner to demonstrate learning in other than a written response • often strong learner identification with product • assessment of quality may be difficult • expert judgment may be required • usually involves completed product	• ability to perform a complete task (not simulated)
3. ORAL Interview	• oral communication	• direct questioning designed to elicit responses to assess learner outcomes • may be one-to-one or a panel of interviewers • may be structured or unstructured • may be used to assess complex issues more quickly than with writing techniques • individual ability to perform influenced by personality and/or emotional characteristics • difficult to verify student response	• ability to communicate effectively • ability to organize thoughts and express them clearly and rationally • learner anxiety or self-confidence
Group Discussion	• student group addresses problem and submits group solution orally or in writing	• can be used with wide range of complexity • degree of structure that can be applied is limited • difficult to assess individual competencies	• interpersonal skills • skills in leading and in following • communication skills • listening skills

TABLE 1 (page 4)

TYPE	RESPONSE MODES	GENERAL CHARACTERISTICS	OUTCOMES MEASURED
4. SELF-REPORT	• rating scales • inventories • checklists • autobiographical reports • diaries, journals of experiences	• useful for acquiring information difficult to obtain by any other method • tends to enhance self-analytical ability • accuracy of information dependent on individual's knowledge of self • requires degree of trust in assessor by learner • most closely apprcximates performance in world outside educational institutions	• attitudes • problem identification • interests • past experiences • organizational ability • changes over time
5. PEER ASSESSMENT	• written or oral report • interview/ dialogue • checklist • rating scale	• possible lack of subject matter expertise • may reflect bias of assessor • difficult to determine basis of peer assessment • always to be used in combination with another method	• knowledge of facts • attitudes • interpersonal skills • changes over time

One of the difficulties with selecting assessment approaches like those listed in Table 1 is that of availability. Sometimes it is possible to locate instruments that are suitable. Very often it is necessary to adapt or build on existing instruments, and sometimes construction of new instruments will be necessary.

For example, assume that a student's learning contract or project calls for acquiring some of the knowledge and skills used in social science investigations. More specifically, the student wishes to examine the techniques of survey research and case studies. The contract or project objectives state that the student will be able to:[4]

1. Design and administer interview schedules.
2. Learn about and apply observational techniques.
3. Develop skills in displaying data with appropriate tables and graphs.
4. Prepare a case study of a selected setting or event utilizing the skills and techniques of objectives 1-3.

A plan for evaluating the student's work, based on these objectives, probably will rely on the student's performance as indicated by the products resulting from the completed project, i.e., the interview schedule and the case study itself. The student products are the primary instruments for testing the extent to which the student achieved the objectives. However, the teacher may wish to broaden the assessment--to "test the limits" of the student's learning--or to verify by other assessment means. For example, the teacher may wish to: (1) assess knowledge of vocabulary associated with types of data displays or concepts about case study methodology. Since it is unlikely that objective tests would be available, teacher-made tests based on the specified criteria will be necessary.

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[4] The issue of standards for these objectives is not addressed because they will vary widely depending on age and experience of the student and expectations of the teacher.

Other assessment possibilities include an oral report by the student to the class, an assessment of the student's performance as seen by the persons or groups being studied, a role-play in which the student simulates his or her interview with a colleague.

The above example illustrates how the selection of assessment approaches is dependent on the content of the objectives, how they are stated, and the kind of performance expected. In many cases, a multi-approach to assessment requiring careful planning and instrument development will be necessary.

HOW CAN ASSESSMENT DATA BE ORGANIZED FOR EFFECTIVE USE?

Whatever the methods that have been selected for assessing the outcomes of various learning activities, there is always the necessity of maintaining a record for each student that portrays his or her accomplishments. Relying on the grade book only, while convenient, is not particularly reliable nor is it very informative to teachers and students. It may be an inappropriate means of recording for certain types of assessment methods.

What is needed is a documentation system that provides a comprehensive, but selective, record of learner outcomes--a portfolio of the learner's accomplishments. The term "portfolio" has been used extensively by post-secondary institutions to refer to a method of documenting prior learning for college credit. This is a procedure by which learners gather together representative samples of their work in a variety of areas as evidence of their experiences and accomplishments. A faculty committee evaluates the portfolio for the purpose of assigning academic credit.

It is proposed that maintaining a portfolio of ongoing learning for each student in all important curricular areas provides not only an information base for monitoring progress, but a record of what the student has done and evidence of how well the student has performed. Such a record can be more informative than grading systems to others needing to learn about the student's capabilities, e.g., college admissions, potential employers, or in the case of secondary programs, parents.

The following guidelines for maintaining portfolios are suggested:

- Include a variety of evidence, e.g., student generated reports, studies, written analysis, designs, essays and work samples; self-ratings, ratings by others, test scores. For example, an English portfolio might contain a variety of writing samples that illustrate creativity, capabilities in extemporaneous writing, organizational capabilities, and use of vocabulary, grammar, and punctuation. It might also contain ratings by the teacher regarding such traits as initiative, motivation and independence. Including a variety that will accommodate different sets of interests and values on the part of individuals who make judgments about the student's accomplishments.

- Include examples that illustrate the student's best work--evidence of what the student can do. This may, of course, be slightly different from the usual quality of work completed by a student. The latter type is also kept for the purpose of determining progress and for counseling with the student about problem areas and needed improvement.
- Include one or more examples of each assessment method that were selected to help ensure a balanced perspective concerning the student's activities.
- Keep a cumulative record of student accomplishments. This will permit the teacher and student not only to look at progress, but also to examine different types of performance approaches in terms of the learner's facility with them.

While the portfolio provides a comprehensive record of the learner's progress, it is also useful to summarize progress. This may be done as projects or learning contracts are completed, or at other designated time intervals. Summaries may be a requirement for the student to complete although the teacher's comments are also solicited. In many programs where community-based placements are used, the site supervisor's or resource person's evaluation of the student's progress is periodically obtained and should become a part of the portfolio.[5]

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[5] See the APPENDIX for examples of forms that have been used to summarize student progress. Items 1 and 2 were developed by the Far West Laboratory's Experience-Based Career Education Program (for secondary level students). Item 3 is reprinted from Fieldwork Supervisor's Manual by Rosemarie Bowler, San Francisco State University, for post-secondary use.

WHAT IS THE PROCESS FOR JUDGING QUALITY?

Here the issue has to do with placing "value" or judgments of worth on the products of learning activities. The basic question is whether learning, as demonstrated by the products (reports, essays, tests, work samples), meets the criterion standard that was established during planning.

For such products as objective tests, evaluation normally consists of scoring and referring to the standards that were set for different levels of performance. For learning products that require subjective judgment, the standards are not so easily set nor is determining whether the standards were met an easy task. However, with instructional approaches that call for nonobjective demonstrations of learning based on the student's experiences, using subjective evaluation techniques are almost inescapable. Furthermore, such techniques provide a richness of performance information concerning behaviors that are often complex, that cannot be obtained any other way. Performance tests of this kind measure the ability of an individual to use what has been learned. Often the evaluator is required to forego such evaluative comments as right or wrong, and deal more with determining how effective the learner responded.

Tests of this kind, of course, permit a wide range of responses and concurrently should permit a range of "correct" responses. Suggestions for judging the quality of correctness are given below.

1. Develop criteria for judging responses such as completeness of the response, efficiency of the response in dealing with the problem/issue, uniqueness or creativity of the response, consideration of alternatives, how well response communicates to others, etc. Use of a coding system or rating scales can be applied to place a value on the learner's response or product.

2. When feasible and desirable, use multiple evaluators to judge the quality of work using the criteria developed. This helps prevent biases, preconceived judgments, or other extraneous factors from affecting the evaluation.

3. Effectiveness of the performance ought not to be judged just in terms of whether the performer was pleased but by others who have a stake in this or future performances of a similar kind.

4. When possible, involve the learner in the process. Obtain his or her assessment as well -- partly because of the beneficial effects doing so will have on future performances.

5. Communicate results of the evaluation to the learner making certain that he or she understands the reasons for the outcomes.

HOW MIGHT ASSESSMENT APPROACHES VARY AS A RESULT OF DIFFERENT LEARNING OUTCOMES? ①

Describe at least two ways to assess each of the following outcomes:

- Effective study habits
- Ability to conduct a museum tour
- Knowledge and skills about library operations
- Preparing an evaluation plan for a day care center
- Knowledge of the stockmarket

Refer to Table 1 in the READING section as needed and consult the guidelines for assessment. Try to select approaches that will provide information that is both appropriate for the content and beneficial to the learning process.

② HOW CAN A GROUP LEARNING PROJECT BE ASSESSED?

a. Assume that a group of your students plan to study the operation of a local television station. Planned student outcomes include (1) learning about communication techniques, (2) station programming, (3) staff roles, and (4) responsiveness to the community.

You have been asked to report on the outcomes of this group project to a curriculum committee. What kind of evidence of student accomplishments would you want to have? And how would you go about getting this evidence?

b. Prepare a brief statement to share with your colleagues. List the anticipated student outcomes, some possible ways to document these competencies, and the advantages or difficulties of the proposed measures.

c. How does this group assessment process differ from planning individual assessment?

HOW CAN ASSESSMENT OF STUDENT PROGRESS BE ACCOMPLISHED WITHOUT WRITING REQUIREMENTS? ③

a. Read the following background information on the problem situation:

BACKGROUND: Jim Maxwell is preparing to teach a science course for secondary school seniors using experiential education procedures. Students will have the opportunity to study a particular scientific principle, invention, or discovery made in the past thirty years and work with appropriate community groups, agencies, or businesses to examine the impact of its actual or potential application in the community.

Twenty-five students have enrolled in the course and Mr. Maxwell has been reviewing their files to determine their academic strengths and weaknesses. He has noticed that several students have serious writing skills deficits.

In the past, Mr. Maxwell has required written reports on students' on- and off-campus learning activities and outcomes. He is concerned, however, that requiring written reports may impose an unfair penalty on some students. On the other hand, he wants tangible evidence of each student's experiences, problems, and progress in the course.

b. Consider the points of view offered in the following dialogue:

JIM: I'm just not sure what kinds of projects I should require the kids to do so that I can grade them. A lot of them might have trouble with written reports.

SUE: You need to remember that they're high school seniors. They need to be able to write before they leave this school.

BRAD: I agree they should be able to write, but Jim's course is for another purpose. It involves experiences that are intended to produce life skills as well as academic skills. Students should learn to write in a basic skills course.

SUE: But I don't think we should take the opportunities for developing writing skills away from students. Besides, what better way is there to know what students are learning.

c. Determine the following:

1. What methods of assessment are most appropriate for students with various levels of writing skills?

2. What methods of student assessment are most consistent with the experiential education being used in Mr. Maxwell's course?

3. Do the assessment methods selected reflect the guidelines on pp.7 - 9 of the READING section?

HOW CAN ACADEMIC CREDIT BE AWARDED FOR COMMUNITY-BASED ACTIVITIES? ④

a. Read the following background information on the problem situation:

BACKGROUND: Suppose you have a (college) student who is interested in a career in the development and management of day care facilities. She needs to learn more about child development, and you and she have designed a learning plan which focuses on child development through various kinds of activities over a period of 3 months. During that time she will: (1) take a standard 3 unit course on child development; (2) work 12 hours/week at a day care center; (3) do some independent study in the area of development of deaf children, since she is particularly interested in facilities for such children.

b. Consider the following:

How might you determine the amount of credit that the student would get for items (2) and (3) above? Consider what types of information you will need to make this decision and where you would obtain it. Remember that once the time and classroom framework are removed from the learning, one can no longer depend on the usual measures of "in class" time for credit. Instead one has to develop new guidelines--perhaps in relation to old ones.

⑤ HOW ARE STANDARDS SET AS A RESULT OF VARYING TYPES OF SUBJECT AREAS AND COMPETENCES?

Seldom can one identify a rationale for setting standards that will remain consistent across subject areas. It is sometimes difficult to identify a rationale at all. This is because standards are sometimes arbitrary and arrived at by what "feels right."

For this activity, it is proposed that you interview a number of teachers to determine how they set standards for the grade or credit assignment system in use. Try to interview teachers in different subject matters.

Following the interviews, describe the process each used and evaluate it in terms of the criteria given on p. 12 of the READING section. Were there other criteria that were used?

WHAT FACTORS INFLUENCE MAKING QUALITATIVE JUDGMENTS ABOUT LEARNING OUTCOMES? ⑥

a. Gather together three or four samples of a student's work in a single subject area where the samples cannot be scored as right or wrong. Term papers, reports and media productions are examples.

b. Enlist the aid of two or three colleagues and ask them to individually evaluate the student's work in terms of these work samples.

c. Compare evaluation outcomes. Identify the criteria used by each evaluator and try to determine reasons why differences in judgments occurred.

d. As a group, develop and agree on criteria for judging the student's work. Using these criteria, each evaluator should repeat the task of evaluating. Compare results again. Was the task of evaluating easier, more difficult? Was there increased agreement?

⑦ HOW CAN AN EXPERIENCE-BASED PROGRAM THAT INTEGRATES SEVERAL SUBJECT MATTER AREAS BE EVALUATED?

a. Read the following background information on the problem situation:

BACKGROUND: The staff of a secondary school is initiating an experiential education program which will offer a series of courses for 11th and 12th graders. A description of the program providing the following information has been sent home to parents:

a. Off-campus learning activities will be integrated with classroom learning activities and discussions.

b. Each course in the program will use four hours per week of off-campus learning activities and three hours per week of classroom activities as a part of its instructional approach.

c. The courses included are:

(1) business and commerce
(2) life science
(3) social science
(4) physical science

d. A list of community resources is available for each course.

e. Four instructors are available to teach the courses.

f. Enrollment is limited to 80-90 students.

g. Each student will be supervised off campus by a community person responsible for helping that student complete a course project.

Several parents have called the principal of the high school indicating some anxiety about how the program would affect their son's or daughter's transcripts and future eligibility for college. A meeting has been scheduled between the interested parents and the teachers to discuss student assessment and academic credit.

b. Assume that the parent's specific questions are as follows:

1. How will you assess learning?
2. How will teachers know whether to give full credit?
3. What kind of evaluation or grading system will be used?

Prepare a detailed outline that responds to the three "parent" questions. Pay attention to such issues as information sources for assessing student performances, student role in evaluation, and the relationship of learning goals and objectives to the selection and use of assessment methods.

⑧

SELF-ASSESSMENT

Review the assessment methods you have recommended for use in Learning Activities 1-3 of this section.

1. Did you tend to recommend any one particular type of assessment? If so, which type?

_____ written

_____ performance

_____ oral

_____ self-report

_____ peer assessment

2. Have you had any prior experience in using any type of assessment methods? If so, which ones?

_____ written

_____ performance

_____ oral

_____ self-report

_____ peer assessment

3. Which types of assessment methods do you feel most comfortable using?

4. Did you recommend using multiple assessment methods? In which circumstances?

5. If you are currently associated with an institution, which types of assessment methods are commonly used at this institution? Are there any impediments or restrictions against using other assessment methods?

6. List some pro's and con's of the listed methods for the following situations.

   a. Assessment of a one-day group field experience:

      essay test
      group discussion
      peer assessment
      objective test
      role play
      products

   b. Assessment of an individual student with poor writing skills in a community placement (hospital or laboratory):

      objective test
      products
      self-report
      interview
      work sample
      case study

7. Which method(s) would you recommend using for each of the above situations?

8. What additional activities or experiences do you need to improve your ability to select appropriate assessment methods?

MEDIA

In Addition to the Classroom, Far West Laboratory, 1855 Folsom Street, San Francisco, CA 94103, 1979.

Two 18-minute color videotapes showing the role of teachers in different secondary and post-secondary programs using experience-based techniques. The teacher functions of planning, monitoring and assessing students are illustrated.

ORGANIZATIONS & ASSOCIATIONS

Council for Advancement of Experiential Learning, Lakefront North, Suite 300, Columbia, MD 21044.

CAEL is an educational association of institutions of higher education and other educational organizations. Its initial purpose was to foster experiential learning and the valid and reliable assessment of its outcomes. CAEL continues to be a strong contributor to the literature on assessment as well as many other aspects of experiental learning.

SELECTED ANNOTATED BIBLIOGRAPHY

This bibliography represents a variety of materials: some scholarly, others "popular;" some theoretical, others practical; and some lengthy, while others are brief. It is hoped that the annotations are sufficiently detailed to show how the reader might profitably sample its offerings.

Breen, Paul, et al. Learning and Assessing Interpersonal Competence--A CAEL Student Guide. CAEL, American City Bldg., Suite 403, Columbia, MD 21044, 1977.

> CAEL report #2 is a companion volume to #1, by the same authors, Teaching and Assessing Interpersonal Competence--A CAEL Handbook. It is based on the same theoretical framework and contains some identical sections. Its special contributions are chapters on planning for assessment. They offer detailed suggestions for developing a life goals autobiography, articulating personal goals to interpersonal development, and selecting an experiential learning site, as well as surveying 11 kinds of assessment.

Bloom, Benjamin S., et al. Handbook on Formative and Summative Evaluation of Student Learning. New York: McGraw-Hill, 1971. xvi, 924pp.

> The authors intend this volume to serve as a handbook on solving evaluation problems for prospective and practicing teachers. The first part of the book deals with evaluation problems all teachers are likely to encounter. The second part of the book deals with evaluation in many subject areas (such as language arts, art education and industrial education) on several levels (preschool and secondary). Many examples are included in the text, references follow each section or chapter, and name and subject indices increase the utility of the text.

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*Some of the items in the bibliography were taken from Experiential Learning: An Annotated Literature Guide, 1978 supplement. Council for the Advancement of Experiential Learning (CAEL). American City Building, Suite 212, Columbia, MD 21044. Those items are identified with the acronym (CAEL).

Christensen, F.A., et al. Student Guide to Portfolio Development. Palatine, IL: William Rainey Harper College, 1977. (Available for $5.95 from the Harper College Bookstore.)

> A workbook for students developing portfolios. Using explanations, examples and work sheets, students are taken step-by-step through the portfolio development process. The guide includes an introduction to contraditional education, alternate ways to earn college credit, educational planning, development of a resume, identifying strengths, and writing credit requests. (CAEL).

DeCecco, John P. The Psychology of Learning and Instruction: Educational Psychology. Englewood Cliffs, NJ: Prentice-Hall, 1968. xvi, 800pp.

> DeCecco has prepared a college textbook for prospective teachers which is intended, among other things, to provide fairly specific guidelines for analyzing student entering behavior, stating instructional objectives, providing the necessary conditions for various types of learning, and constructing tests and interpreting test scores. Thus, this text pertains to our units on planning, monitoring, and assessing.
>
> It is organized into sections on instructional models and objectives, entering behavior, instructional procedures, educational innovations, and performance assessment and research. A bibliography and an index complete the book.

Ebel, Robert L. Measuring Educational Achievement. Englewood Cliffs, NJ: Prentice-Hall, 1965. xii, 482pp.

Ebel intends to provide prospective and practicing teachers at all educational levels with the concepts, principles, and procedures that can help them prepare better tests of educational achievement of learning. He is not concerned with standardized testing.

Chapters cover the need for better classroom tests; what achievement tests measure; how to plan a classroom test; the characteristics and use of essay tests; how to use true-false tests; how to write multiple-choice test items; how to administer and score achievement tests; describing test scores statistically; how to judge the quality of a classroom test; how to estimate, interpret and improve test reliability; how to improve test quality through item analysis, the validity of classroom tests, and marks and marking systems. A glossary of educational measurement terms and an index complete the book.

Fantini, Mario D., ed. Alternative Education: A Source Book for Parents, Teachers, Students, and Administrators. New York: Anchor Books, 1976. xviii, 500pp.

The emphasis in this volume is on expanding the boundaries of public education. The 62 contributions are arranged into nine sections, each prefaced by the editor's comments.

Section I deals with background, philosophy, and criticism. Section II focuses on alternative schools outside the system. Section III shows how alternatives have entered the public school "mainstream." Section IV begins the discussion of planning and implementing public school alternatives, while Section VII picks up on the financial considerations, Section VIII highlights the political considerations. Section V presents a case study of a district-wide alternative schools approach in the Minneapolis public schools. Section VI discusses evaluation, and Section IX concerns teacher preparation.

A bibliography of audio-visual and printed matter, organizations, and resource centers and an index conclude the book. The emphasis of this book, within the sphere of public education, is secondary education.

Fitzpatrick, Robert and Morrison, Edward J. "Performance and Product Evaluation" in Thorndike, Robert L. ed. Educational Measurement. Washington, DC: American Council on Education, 1971. Pp.237-270.

> Performance and product evaluation is done through what is commonly called a performance test, in which some criterion situation is simulated to a much greater degree than is represented by the usual paper-and-pencil test. The authors discuss simulations, contexts in which performance tests may be used, and the mechanics of developing, administering and scoring such tests. A list of references follows.

Forrest, Aubrey. Assessing Prior Learning--A CAEL Student Guide. CAEL, American City Bldg., Suite 403, Columbia, MD 21044, 1977. iv, 110pp.

> CAEL report #4 is directed toward adults who petition for college credit based on prior experiential learning and aims at assisting them in maximizing the value of such learning and successfully obtaining appropriate credit. After a general introduction, it leads them step by step through the process of identifying and describing learning outcomes, relating outcomes to educational goals, documenting experience, measuring outcomes, requesting credit and putting together the portfolio. A bibliography and a number of appendices supplement this well-illustrated practical guide.

Gronlund, Norman E. Measurement and Evaluation in Teaching. New York
Macmillan, 1976. x, 590pp.

> This third edition is different from the earlier two in paying increased attention to both the use of tests and other evaluation instruments in improving instruction and learning and the preparation, use and evaluation of criterion-referenced tests. Other aspects of the book remain the same. Its basic theme is still that classroom evaluation is an integral part of the teaching-learning process. It is still aimed at prospective and practicing teachers at the elementary and secondary levels.
>
> Chapters are organized into the following scheme: the evaluation process; constructing classroom tests; using standardized tests; evaluating procedures, products and typical behavior; using evaluation results in teaching. Appendices include elementary statistics, a table of squares and square roots, a list of test publishers and objective-item pools, a selected list of standardized tests, and a taxonomy of educational objectives. Author and subject indices complete the book.

Hogan, T.P. Assessment Issues for Wisconsin's Extended Degrees. Green
Bay, WI: Office of Educational Research and Development, University of
Wisconsin-Green Bay, 1977.

> A series of six papers which describe assessment issues most pertinent to an adult educational program in which assessment of prior college-level learning as well as assessment of classroom and experiential learning are important components of the program. Issues addressed include: the use of assessment as a measure of quality control; the importance of assessing a student's learning rather than just the experience; fundamental principles guiding the specification of assessment procedures; methods for implementing assessment techniques; and procedures for recording the results. (CAEL).

Hodgkinson, Harold L., et al. Improving and Assessing Performance: Evaluation in Higher Education. Berkeley: University of California, Center for Research and Development in Higher Education, 1975. vi, 242pp.

Improving and Assessing Performance is a report from a study of evaluation in innovative higher education programs. It is aimed at practitioners, especially college faculty and administrators, who want to know more about evaluating people, programs and institutions. Material ranges from the general methodology of evaluation to the development of specific evaluation techniques, and from annotated resources to recommendations. Methods of reporting evaluation results are also discussed.

Hodgkinson, et al. present a concise "nuts and bolts" learning tool.

Keeton, Morris, T., et al. Experiential Learning: Rationale, Characteristics, and Assessment. San Francisco: Jossey-Bass, 1977. xxx, 266pp.

A distillation of theoretical papers commissioned by the CAEL Steering Committee to illuminate the practical work of CAEL. Independent interpretations rather than a prescriptive credo, they are aimed at a broad audience of students, faculty, administrators and educational policymakers.

Part One concerns the history, present conditions and future of post-secondary learning options and credientials, especially the role of experiential learning. Part Two analyzes experiential learning, and Part Three addresses both the state of the art in assessment of experiential learning and possible avenues of improvement. Four priority topics are reflected in the papers: within learning objectives, interpersonal skills and personal development; within learning arenas, the sites and setting of work experience; within instrumentation and methodology, the portfolio as a tool of assessment; within assessors, the use of expert judgment in assessment.

Two appendices concern current CAEL publications and CAEL committees, and a bibliography and index conclude the book. The CAEL publications are presented in a useful bibliographic essay format.

Marshall, V.C. "How to Assess College Students During External Placements: A British View." *Journal of Cooperative Education*, 1974. 10(2), pp. 1-12.

Describes approaches used to assess British university and polytechnic students who alternate academic study with time spent in industrial placements in so-called "Sandwich Courses." Includes a sample assessment form and discussion of areas of assessment.

McClelland, David C., et al. *The Achievement Motive*. New York: Irvington Publishers, 1976. xxxii, 386pp.

This is a reissued edition, with a new preface, of a book originally published in 1953. It proposes a theory of motivation, offers a practicable method of measuring achievement, and discusses the possible origins of the achievement motive.

Lists of figures and tables, appendices, references, and indices supplement the scholarly text. The new preface traces the theory and research which have grown out of this work.

McKean, B., ed. *Toward Defining Measurable Objectives in the Affective Domain for Experiential Education Programs*. Denver: Colorado Outward School, 1975. (Available for $1 from Colorado Outward Bound School, 945 Pennsylvania Street, Denver, Colorado 80203. ERIC #ED139572. EDRS Price MF-$0.83 plus postage, HC not available from EDRS.)

Discusses the necessity for objectives; describes the affective domain and the utilization of behavioral indicators to make affective objectives in experiential education workable. Six program descriptions are included as examples of the combination of affective measurable objectives with the field of experiential education. Illustrating what is possible and being developed in the field of experiential education, the examples include the necessary behavioral indicators, which guide the teacher-observer in recognizing and categorizing student change. The programs cover: involvement in the local community; living within a new community environment; outdoor activities for spring, summer, fall, and winter; and outdoor pursuits for mentally retarded and for "disaffected" students. (CAEL)

Meyer, Peter. Awarding College Credit for Non-College Learning. San Francisco: Jossey-Bass, 1975. xxvii, 196pp.

> The author, an initiator of the Adult Collegiate Education program at Queens College, City University of New York, states six major purposes of his book: to demonstrate the need for establishing faculty-based models for granting academic credit for learning achieved through nonacademic life/work experiences; to explain the academic merit of the process; to examine the process as it exists in a variety of institutions; to identify some of the major problems of the process and suggest solutions; to offer specific guidelines for implementing new programs; and to make some recommendations for further study and action. He stresses that the book is limited to the examination and crediting of prior learning at the undergraduate level, that it is focused on faculty-based models of granting credit for prior learning. The author does not pretend to present a complete survey of such programs, nor does he present such data as he has gathered in a rigid statistical format.
>
> In chapters entitled "Need and academic rationale," "Basic decisions," "Getting started," "Documentation," "Assessment and award of credit," and "Guidelines and recommendations," Meyer uses data in an illustrative manner. A brief list of contributing institutions and programs, a selective bibliography in which the most important works are pinpointed, and an index complete the book.

Popham, W. James and Balker, Eva L. Establishing Instructional Goals. Englewood, Cliffs, NJ: Prentice-Hall, 1970. x, 130pp.

> A collection of five self-instruction programs concerning instructional goals for prospective and practicing teachers, elementary through college levels. The first program provides an overview, the second assists in developing precisely stated instructional goals, the third provides tools for selecting appropriate educational objectives, the fourth describes ways of establishing performance standards, and the last examines a curricular rationale.
>
> Each of these topics is also dealt with in a conventional text, Systematic Instruction, by the same authors. In addition, the authors have prepared other related self-instruction programs; see, for example, Baker and Popham, Expanding Dimensions of Instructional Objectives, in this list.

Pottinger, Paul S., and Goldmith, Joan, eds. Defining and Measuring Competence: New Directions for Experiential Learning. No. 3. Sponsored by Council for the Advancement of Experiential Learning. San Francisco: Jossey-Bass, 1979.

This source book, sponsored by the Council for the Advancement of Experiential Learning, is a well-integrated collection of reflections on the concept of competence, the current state of the concept and its implications for education and work. Competence is addressed from several points of view as to purposes, efforts, and concepts. Competence is discussed in terms of licensing, its identification and assessment, its meaning for an effectively functioning citizen, and future directions.

Rose, Clare and Nyre, Glenn F. The Practice of Evaluation. ERIC Clearinghouse on Tests, Measurement, and Evaluation. ERIC/TM Report 65. Princeton, NJ: Educational Testing Service, December 1977.

This monograph on evaluation provides, in a concise overview of various theoretical concerns with which educational evaluators have been concerned. Issues such as definition and descriptions of models, designs, and integrated approaches are succinctly presented. The monograph concludes with a set of evaluation case studies.

Thorndike, Robert L., ed. Educational Measurement. Washington, DC: American Council on Education, 1971. xx, 768pp.

In the second edition, this collection of papers is arranged in four parts: test design, construction, administration and processing; special types of tests; measurement theory; and application of tests to educational problems. The editor's introductory paper surveys educational measurement for the 70's. Among the selections which follow, Krathwohl and Payne discuss defining and assessing educational objectives, Fitzpatrick and Morrison look at performance and product evaluation, and Davis examines measurement in student planning and guidance.

Each paper has its own list of references; a list of figures and an index facilitate use of the volume.

Willingham, Warren W., et al. The CAEL Validation Report. CAEL, American City Bldg., Suite 403, Columbia, MD 21044, 1976. xiv, c. 500pp.

The CAEL project is organized in three stages: a development stage to produce new assessment procedures and materials; a validation stage to test and improve the products of such work; and a utilization stage. This report documents the procedures and results of the second stage.

After an introductory overview, the second chapter describes the experimental use of the CAEL reports, their review, and the feedback generated by the review. A third chapter sets forth the rationale of the field research and sketches it generally. Chapters four through six present the procedure and findings of ten studies in the areas of assessing work competencies in occupational programs. Chapter seven discusses the nature of the faculty agreement in the assessment process, and the last chapter is a concluding overview.

Willingham, Warren W. Principles of Good Practice in Assessing Experiential Learning. CAEL, American City Bldg., Suite 403, Columbia, MD 21044, 1977. viii, 60pp.

This, the 27th CAEL report, provides a single-source overview of the important principles of good assessment practice as represented in the earlier 26 CAEL reports.

The introduction sets out some background concerning CAEL's view of its work and the nature of the problems it has addressed. Sections I-VI concern six steps in assessment; sections VII-IX concern administrative aspects of assessment. All nine sections are in outline form, with references to fuller discussions in the other CAEL publications. The booklet concludes with a useful annotated list of those items.

Worthen, Blaine R. and Sanders, James R. Educational Evaluation: Theory and Practice. Worthington, Ohio: Charles A. Jones, 1973. xii, 372pp.

This book was prepared to pull together the best of the emerging literature on educational evaluation and to identify serious gaps in the literature and provide content to fill those gaps. It is designed as a basic text for educational evaluation courses, but may also be used as a basic or supplemental text for other courses where educational evaluation is an important topic or as a reference for advanced undergraduates, graduate students and professional educators who encounter problems in educational evaluation.

Authors discuss evaluation as a disciplined inquiry, differentiating it from research; present eight frameworks for planning evaluation studies, applying each to a problem and comparing their strengths and weaknesses; talk about some important considerations in planning evaluation studies; and look at the future of evaluation, outlining steps which must be taken to allow evaluation to reach its full potential. A list of references, author and subject indices follow.

APPENDIX

SAMPLE EVALUATION FORMS

ITEM 1

SECONDARY EVALUATION FORM*

Experience-Based Career Education	STUDENT PROGRAM CHECKLIST

This checklist serves as a reference for reviewing a student's overall program and participation in EBCE. The Learning Coordinator may also use the checklist to bring problems to the attention of the EBCE Program Director.

STUDENT ______________________ LC __________________ DATE ______________

	YES	NO
1. Does the student's program provide for pursuit of individual interests?		
2. Is the student making progress toward refining his/her long-term goals and plans?		
3. Is the student spending 50% of his/her time in project activities, including at least 30% of his/her time with RPs and ROs?		
4. Is the student working toward at least 25 EBCE credits this term?		
5. Is the student making satisfactory progress toward meeting graduation requirements he/she has planned to meet this term?		
6. Is the student enrolled in an external course? How many? __________		
7. Have all of the student's Project Plans been approved?		
8. Is the student working actively on all of his/her projects?		
9. Has a Diagnosis and Plan or other appropriate planning form been completed and approved for each of the student's supplementary learning activities?		
10. Is the student making satisfactory progress in supplementary learning activities?		
11. Has credit been assigned for projects or other work completed so far?		
12. Does the student's total set of project goals and indicators include some higher level cognitive objectives (beyond recall, comprehension levels)?		
13. Does the student regularly attend required advisory group meetings?		
14. Does the student regularly attend required project seminar meetings?		
15. Does the student complete required program forms and reports?		
16. Does the student keep his/her appointments and commitments to Resource Persons and Organizations?		
17. Does the student meet his/her own deadlines for projects and products?		
18. Has the student met EBCE minimum requirements in the following areas? (If not, what is being done?)		
Reading		
Writing		
Oral Communications		
Quantitative Skills		
Career Awareness		
Decision-Making		

---

*From the Experience-Based Career Education program developed by Far West Laboratory for Educational Research and Development, San Francisco, California.

STUDENT PROGRAM CHECKLIST

Page 2 of 2

		YES	NO	DON'T KNOW
18. Is the student expanding his/her knowledge and skills in the core curriculum areas? (If not, comment below. If you don't know, confer with the student to learn his or her own assessment in these areas.)				
BASIC SKILLS	Reading			
	Writing			
	Oral Communications			
	Quantitative Skills			
LIFE SKILLS	Interpersonal Skills			
	Problem-Solving			
	Decision-Making			
	Inquiry Skills			
CAREER DEVELOPMENT	Career Awareness			
	Self-Development			
	Career Decision-Making and Planning			
	Career Entrance Skills			

19. Is this student's participation in the program satisfactory to you: [ ]Yes [ ]No (If yes, in spite of several negative answers above, give rationale. If not, what action do you recommend?)

ITEM 2
SECONDARY EVALUATION FORM*

Experience-Based Career Education	PROJECT SUMMARY REPORT	*Page 1 of 3*

Student ______________________________ L.C. ________________________________

Project Title ______________________________ No. ____ Package ________________

SECTION I. What resources did you use? (Summarize information from Activity Reports)

NAME OF RESOURCE *(If you list an RP, include the company or organization)*	TYPE			LEVEL			HOURS SPENT
	RP	*RO*	*CR*	*O*	*E*	*I*	

SECTION II. Besides visiting resources, what other research did you do?

RESEARCH ACTIVITY *(Give description if not included above)*	HOURS SPENT

SECTION III. What products did you produce? List each product which you have completed and the person who will evaluate the product. (See Section B of Student Activity Reports for hours spent)

PRODUCT DESCRIPTION	HOURS SPENT	EVALUATOR

TOTAL HOURS SPENT VISITING RESOURCES *(Enter total from SECTION I)*	
TOTAL HOURS SPENT ON OTHER RESEARCH *(Enter total from SECTION II)*	
TOTAL HOURS SPENT PRODUCING PRODUCTS *(Enter total from SECTION III)*	
TOTAL HOURS SPENT ON THIS PROJECT	

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*From the Experience-Based Career Education program developed by Far West Laboratory for Educational Research and Development, San Francisco, California.

PROJECT SUMMARY REPORT - PROJECT EVALUATION

Page 2 of 3

Instructions to Student: Complete the student evaluation section below, summarizing what you have learned through this project and whether you are satisfied with the quality of your work. Be as specific as you can in the space provided. Then give the form to your Learning Coordinator and arrange a date for formal credit assignment.

AREAS TO BE EVALUATED	STUDENT'S EVALUATION	LC'S COMMENTS
Did you accomplish your goals to your satisfaction? State specifically what you did and did not accomplish, and why. (Refer to your goal numbers)		
Did other significant learning take place? State other subject matter, issues, and skills that you learned. Who can verify this learning?		
What career fields and jobs did you explore? Did you learn what you needed to know about them?		

STUDENT PROJECT SUMMARY REPORT - PROJECT EVALUATION

Page 3 of 3

AREAS TO BE EVALUATED	STUDENT'S EVALUATION	LC'S COMMENTS
Did you improve some of your basic skills through this project? Which ones (reading, writing, oral communications, math)? How?		
How do you assess the quality of your work?	☐ Outstanding ☐ Very Good ☐ Acceptable ☐ Needs Work	☐ Outstanding ☐ Very Good ☐ Acceptable ☐ Needs Work
How much credit should you receive? In what subjects?		Comments:

CREDIT ASSIGNMENT

Subject	Credits	Quality of Work

I have reviewed the student's work and determined that the student should receive credit for the subject(s) and amounts indicated.

APPROVED:

______________________________ Date ____________

ITEM 3
POST-SECONDARY EVALUATION FORM*

Final Evaluation of Student Intern

Student ____________________ Name and title of supervisor ____________________________________

Agency ____________________ Number of weeks worked ____________________________________

Average hours worked per week____________________________________

This final evaluation of your student intern is designed to provide a process for identifying and assessing the student's learning and growth during this past semester in your agency. This evaluation is extremely important to the student. The instructor will use it as a tool to evaluate the student's fieldwork experience learning. Please indicate which rating standard you used in this evaluation, whether you compared the student to his/her entry level skills, other undergraduate students you have had, or beginning level staff members.

DIRECTIONS FOR RATINGS:

Please record the student's degree of effectiveness by writing the appropriate number (1-5) in the blank before each question. Use a 0 if there has been no opportunity to observe the skill or if it is not relevant to the field setting.

1	2	3	4	5
somewhat ineffective	minimally effective	moderately effective	very effective	highly effective

I Relations With Others

____ 1. Ability to communicate with staff

____ 2. Ability to communicate with clients

Comments____

____

II Supervision

____ 1. Ability to utilize supervision constructively

____ 2. Openness to criticism

____ 3. Seeking and using help

Comments____

____

III Personal Qualities

____ 1. Decision making

____ 2. Trust and confidentiality

____ 3. Initiative

____ 4. Creativity

____ 5. Dependability

____ 6. Ability to learn

____ 7. Sensitivity to professional ethics

Comments____

____

*Used by the Psychology Department Field Services Course, San Francisco State University.

IV Skills

____ 1. Ability to utilize direction
____ 2. Analyzing problems
____ 3. Counseling
____ 4. Effective listening
____ 5. Nonverbal communication
____ 6. Organizing and carrying out assignments
____ 7. Self evaluation
____ 8. Verbal communication

Comments____

V General

____ 1. Attitude toward work performed
____ 2. Acts appropriately to his/her role in agency
____ 3. Contribution to agency
4. Overall quality of performance
____ -At the beginning of the placement
____ -At the end of the placement

Comments____

What are the student's strengths?

In what areas does the student need improvement?

Please use the following scale to answer the next three questions.

Not at all Beyond expectations
1 2 3 4 5

____ 1. To what extent did the student meet the goals/objectives of the initial contract/agreement?
____ 2. To what extent did the student fulfill the supervisor's expectations?
____ 3. Considering the student's individual change, how would you rate his/her progress?
4. Would you be willing to take this student again? yes/no/maybe
5. Should the student pursue a career in this field?

Uncertain Very Definitely
1 2 3 4 5

ACKNOWLEDGMENTS

Most curriculum development efforts involve a substantial number of people at various stages, and the work represented by this package of materials is a good example. The project staff's concerns about such issues as user acceptance, intended audience perspectives, and effectiveness resulted in extensive use of consultants and reviewers.

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Katharine Ogden, Wendy Lesser, Barbara Graves and Charles Alessi also contributed material based on their own experiences as learning facilitators. Books I and II particularly reflect their efforts.

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